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A

HISTORY

OF

BRITISH BIRDS.

THE FIGURES ENGRAVED ON WOOD BY T. BEWICK.

VOL. II.

CONTAINING THE

HISTORY AND DESCRIPTION OF WATER BIRDS.

NEWCASTLE:

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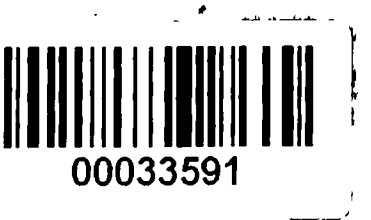

THE PREFACE.

To point out the paths which lead to happiness, however remote they may lie from common observation, and at the same time to forewarn the inexperienced stranger against approaching those which terminate in vice and misery, is a task worthy of the most enlightened understanding. The learned in every age have laboured for these ends: they have set up their works, like beacons and guide-posts, to direct their fellow travellers in the journey of life. These are their marks, left behind them to witness their having lived; and although, like other more vain human monuments, they remain but for a while—since, in the great scale of time, every work of man, like an inscription on the sea-sand, is washed away by the return of the ceaseless wave—yet let not this reflection, so mortifying to human vanity, damp the ardour of doing good; for however temporary the efforts may be, they are not only valuable in themselves, (being records of usefulness laid up for the benefit of mankind) but are incitements also to the emulation of good example, whereby incalculable advantages may be derived to thousands yet unborn. The generality of men, indeed, are little affected by observations of this sort: regardless of the voice of reason, and lost to a sense of duty, they neither know nor enquire

why they were sent upon the stage of life; they stumble on still in darkness and error, and waste their days without a single effort to be useful to the community in which they live: they see not the wonders which the universe presents to stimulate them to reflect on the wisdom, the power, and the goodness, which planned and support the whole. Despairing of their improvement, whose minds have thus been suffered to grow up into maturity uncultivated, we should rather direct our attention to the sowing of the seeds of knowledge in the minds of youth.

The great work of forming the man cannot be begun too early; and, agreeably with this sentiment, how many writers are there who spend their lives in contributing, in various ways, to turn the streams of instruction through their proper channels, into this most improveable soil! Taking children by the hand, from their leading-strings and go-carts, they direct their steps, like guarding-angels, in the outset of life, to prevent their floundering on in ignorance to the end. In these undertakings the instructors of youth are often assisted by the fertile genius of the artist, who supplies their works with such embellishments as serve to relieve the lengthened sameness of the way. Among the many approved branches of instruction, the study of Natural History holds a distinguished rank. To enlarge upon the advantages which are derivable from a knowledge of the creation, is surely not necessary; to become initiated into this knowledge, is to become enamoured of its charms; to attain the object in view requires but little previous study or labour; the road which leads to it soon becomes strewed with flowers, and ceases to fatigue; a flow is given to the imagination, which banishes early prejudices and expands the ideas; and an endless fund of the most rational entertainment is spread out, which captivates the attention and exalts the mind. For the attainment of this science, in any of its various departments,

the foundation may be laid, insensibly, in youth, whereon a goodly superstructure of useful knowledge can easily be raised at a more advanced period. In whatever way, indeed, the varied objects of this beautiful world are viewed, they are readily understood by the contemplative mind, for they are found alike to be the visible words of God. "The Creator, doubtless, did not bestow so much curiosity and exquisite workmanship and skill upon his creatures, to be looked upon with a careless, incurious eye."* Could mankind be prevailed upon to read a few lessons from the great book of Nature, so amply spread out before them, they would clearly see the hand of Providence in every page; and would they consider the faculty of reason as the distinguishing gift to the human race, and use it as the guide of their lives, they would find their reward in a chearful resignation of mind, in peace and happiness, under the conscious persuasion, that a good naturalist cannot be a bad man.

In ideas congenial with these, originated the first incitements, which drew forth the Histories of Quadrupeds and British Birds. From these humble attempts—for every attempt to depicture nature must fall short of the original—it is hoped that some useful instruction may be gathered, and at the same time a stimulus excited to further enquiry. But however this may prove, "innocently to amuse the imagination in this dream of life, is wisdom; and nothing is useless which, by furnishing mental employment, keeps us for a while in oblivion of those stronger appetites that lead to evil."† To the rising generation these efforts to instruct and please are principally directed, and are sent forth with an ardent wish, that they may be found to deserve the notice of youth, and contribute to amuse and to inform them. May the

* Derham's Physico-theology, Book xi. chap. 2.

† Goldsmith.

reader, impressed with sentiments of humanity, on viewing the portraits, spare and protect the originals: and when these books shall become obsolete, or be lost in the revolution of time, may some other more able naturalist arise, equally inclined to produce better to supply their place.

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Thomas Bewick

Newcastle upon Tyne, December, 1805.

INTRODUCTION

TO THE

HISTORY OF BRITISH WATER BIRDS.

In the preceding volume of British Land Birds, the characters of that part of the first great division of the feathered tribes, the beautiful tenants of the air, the woods, and the fields, have been described, and their figures faithfully delineated. Amongst these were enumerated not only the carnivorous and rapacious kinds, which by the accuracy of their scent, discover putrid bodies at a vast distance, and those which, endowed with piercing sight, soar aloft in search of their living prey, and dart upon it from an immeasurable height, with the rapidity of an arrow; but also the various other kinds of land birds, which, although less noticed, are eminently useful to man, by clearing the earth and the atmosphere of myriads of insects, in every stage of their progressive growth, from the invisible egg to the period when they are enabled to flutter on the wing. These, together

with the other branches of this great family, whose lives may be said to be spent more innocently than those of the rapacious kinds, all contribute their services to man, by clearing the earth of the seeds of noxious plants, as well as the trees of innumerable destructive insects, with which they feed their young, and claim for themselves, meanwhile, but a small return of the produce of the fields and gardens, which too often is ungratefully begrudged them.

Nearly the whole of this amusing group appear to relieve each other, and are, in succession, the constant neighbours, or attendants on the habitations of men. They are the subtenants of the cultivated world, and most of them, especially those that are granivorous, may well be termed wild poultry, and are the valued property of the sportsman. Some of these, also, uniting with others of the soft-billed tribe, form the husbandman's cheerful band of choristers, whose comings and goings proclaim the seasons; while, by their notes, poured forth from every tree, and vale, and woody glen, they enliven the face of nature. But having described this division of birds in the former volume, we must now bid them adieu, with this testimony of their usefulness—that they are the industrious regulating little messengers of Providence, without whose assistance the plough and the spade would often find their labours bestowed in vain; and, weak as these instruments may appear, without their aid, instead of a land of overflowing plenty, adorned with flowers and fruits, and trees and woods, in rich luxuriance, and in all their varied beauty, where every grove is made vocal with responsive praises, we should too frequently meet with nothing but the barrenness, and the silence, and the dreariness of a desert.

Leaving those denizens* of nature to enjoy their own native woods, the sheltering coppice, or extended plain, the task

* "Behold the fowls of the air, for they sow not, neither do they reap, nor gather into barns, yet your heavenly father feedeth them."—See *Matt.* vi. 26.

now assigned us is to delineate the figures, and to describe the characters of the other two divisions of this numerous family —the *waders* and the *swimmers*; these are generally found far removed from the cultivated world. In exploring the track which leads us, step by step, to an acquaintance with them, we must travel through reeds and rushes, with doubtful feet, over the moss-covered faithless quagmire, amidst oozing rills, and stagnant pools. The first division of these inhabitants of the marsh are called *waders*. All the genera, and the different species, of this division have divided toes: they are apparently fitted for living on land, but are furnished with propensities and appetites which direct them chiefly to seek their food in moist and watery places, or on the margins of lakes and rivers, and yet they avoid those depths, where it might seem to be found in the greatest abundance. Most of them have long bills, formed to perforate the soft mud and moist earth, and long legs, bare above the knees, whereby they are enabled to wade through shallow waters, in search of food, without wetting their plumage. Others have shorter legs, feathered down to the knees, and bills of varied length: whence it may appear that these are more limited in their powers, and pick up only such insects or grasses, seeds or roots of aquatic plants, as are to be met with near the surface of the ground, or in shallow pools; whilst others again are known to plunge into the water, and by partial swimmings to extricate themselves from it, after they have seized their prey, whether fishes or insects. Some of this class, in the warmer and temperate climates, breed and rear their young in the fens, where they remain throughout the year: others again, but these are few, after the business of incubation is over, disappear, and are supposed to direct their flight northward; while others, and these by much the greater number, are known invariably to leave the north, and to migrate southward on the approach of the winter months,

and to return northward in the spring. It must be observed that the swamps and inland waters of temperate climes, are also stocked with a numerous set of inhabitants of the second class—the *swimmers*. Some of these, likewise, after having reared their young, migrate much in the same way as the *waders*.

The ornithologist, who does not content himself with bare names and appearance, in examining the economy of the various kinds of birds, and the structure of their several parts, will find ample room for the exercise of his labours in the most minute investigation; and although he can scarcely overlook the slow, and almost imperceptible degrees, by which nature has removed one class of beings from another, yet in his attempts to trace the relationship, or affinity, which one bears to another, he will, with his utmost care, find himself at a loss to ascertain that precise link in the chain, where the doubtful crossing line is drawn, and by which the various genera and species are to be separated. But, however, after he shall have examined a few gradations, upwards or downwards, he will more readily discover the modes of life which the several kinds are destined to pursue; and their ability to perform the various evolutions necessary for the procuring of their food, in that exactitude to which the Author of Nature hath formed them. In some of those which run on the surface of the soft mud, and can occasionally take the water, the indications of their ability for swimming are furnished very sparingly: these indications first appear in the breadth of the under sides of the toes, with the two outer toes joined by a small web. The scalloped membranes attached to the sides of the toes form the next advance: some are webbed to the nails, with deep indentations in the middle, between each toe; others have only three toes, all placed forwards, and fully united by webbed membranes: some have the addition of back toes, either plain, or with webbed appendages

to each; and others again have the four toes fully webbed together. The thighs, in the most expert divers, are placed very far back; their legs are almost as flat and thin as a knife; and they are enabled to fold up their toes so closely, that the least possible resistance is made while they are drawing them forwards to repeat their strokes in the water. Many of these divers are provided internally with a receptacle, seated about the windpipe, for a stock of air, which serves the purpose of respiration, whilst they remain under water: and the whole of the tribe of swimmers have their feathers bedded upon a soft, close, warm down; and are furnished with a natural oil, supplied from a gland in the rump. This oil they press out with their bills from a kind of nipple, and with it preen and dress their plumage, which is thereby rendered impenetrable to the water, and, in a great degree, to the most extreme cold.

Of the number of these birds, both waders and swimmers, a great proportion may not improperly be termed fresh-water birds, as they rear their young, and spend the greater part of their time inland. In this class are the *Ardea*, *Scolopax*, and *Tringa*, with divided toes—the *Fulica*, *Phalaropus*, and *Podiceps*, with finned feet; together with others of the web-footed kinds, chiefly of the genera of the *Mergus* and *Anas*. Among these various kinds, some species are found, which only occasionally visit the sea-shore: others have not been noticed there at all; while others are seen there frequently, feeding on the beach: some, like little boats, keep within bays and creeks, near the shores; others, meanwhile, adventure into the ocean, and sport amidst its waves. To particularize these, with their various places of abode, and the times of their migrations, would here be tedious and unnecessary: they are noticed in the description of each bird.

The northern extremities of the earth seem as if they were set apart for the nations of the feathered race, as their

peculiar heritage—a possession which they have held coeval with creation. There, amidst lakes and endless swamps, where the human foot never trod, and where, excepting their own cries, nothing is heard but the winds, they find an asylum where they can rear their young in safety, unmolested, and surrounded by a profusion of plenty. This ample provision consists chiefly of the larvæ of gnats and other insects, with which the atmosphere must be loaded in that region, during the summer months. The eggs of these insects being deposited in the mud, and hatched by the influence of the unsetting summer's sun, they arise like exhalations, in multiplied myriads, and, as we may conceive, afford a never-failing supply of food to the feathered tribes. An equal abundance of food is also provided for the young of those kinds of birds, which seek it from the waters, in the spawn of fishes, or the small fry, which fearlessly sport in their native element, undisturbed by the angler or the fisherman. In these retirements they remain, or only change their haunts from one lake or misty bog to another, to procure food, or to mix with their kind; and thus they pass the long enlightened season. As soon as the sun begins, in shortened peeps, to quit his horizontal course, the falling snows, and the hollow blasts foretel the change, and are the signals for their departure: then it is, that the widely-spreading winged host, having gathered together, in separate tribes, their plump well-fledged families, directed by instinctive knowledge, leave their native wilds, the arctic regions, that prolific source, whence these multiplied migrators, in flocks innumerable, and in directions like radii from the centre of a circle, are poured forth to replenish the more southern quarters of the globe. In their route, they are impelled forwards, or stop short, in greater or less numbers, according to the severity or mildness of the season, and are thus more equally distributed over the cultivated world; where man, habituated to consider every thing in the creation—

as subservient to his use, and ever watchful to seize all within his grasp, makes them feel the full force of his power. Wherever they settle under his dominion, these pretty wanderers afford a supply to the wants of some, pamper the luxury of others, and keep the eager sportsman in constant employment.

Leaving the lakes and inland watery wastes, to pursue his researches by the brooks and the rivers, in their lengthened course to the estuaries and to the sea, the ornithologist is delighted with the view of the various clean-feathered inhabitants, feeding or preening themselves on the shores, swimming or diving in the current, or wheeling aloft on the wing. Many of these divide their time between the fresh and the salt waters, and serve as aerial guides, to direct his sight over the vast expanse, to other classes of birds that almost entirely commit themselves to the ocean; and with those tribes, at certain seasons, these associate. This multifarious host, thus assembled in distinct families, is sometimes seen to cover the surface of the water to a vast extent: and of all these various families, those of the *Anas* genus, which keep much at sea, form the most considerable, amounting in the whole to ninety-eight species, besides varieties,* a number exceeding that of any other kind. And, when we consider that each family of this genus is often seen in considerable flocks, and add them to those which may more properly be called sea-fowl—beginning with the *Alca*, and ending with the *Pelicanus*—consisting of nine distinct British genera and their species, we shall find the aggregate far to exceed in number the whole of the birds that are supported on the land. Whilst these fishers, in their flying squadrons, are viewed from the cliffs

* It is very probable that many of these varieties, as well perhaps as others that are accounted distinct species, may be a mixed breed, the produce of a kind somewhat different; and that this may also be the case with the varieties of other genera of birds.

and shores of the sea, soaring aloft, or resting secure on the lowering precipice, the ear is often pierced with their harsh shrill cries, screamed forth in mingled discord with the roaring of the surge. Grating as their cries are, these birds are often hailed by the mariner, as his only pilots, while he is tossed to and fro, amidst solitary rocks and isles inhabited only by the sea-fowl.

Although it is not certainly known to what places some of these kinds retire to breed, yet it is ascertained that the greater part of them hatch and rear their young on the rocky promontories and inlets of the sea, and on the innumerable little isles with which the extensive coast of Norway is studded, from its southern extremity—the Lindesness, or Naze, to the North Cape, that opposes itself to the Frozen Ocean. The Hebrides, or Western Scottish Isles, are also well known to be a principal rendezvous to sea-fowl, and celebrated as such by Thomson:

> " Or where the northern ocean, in vast whirls,
> " Boils round the naked melancholy isles
> " Of farthest *Thule*; and the Atlantic surge
> " Pours in among the stormy *Hebrides*:
> " Who can recount what transmigrations there
> " Are annual made? What nations come and go?
> " And how the living clouds on clouds arise?
> " Infinite wings! till all the plume-dark air,
> " And rude resounding shore are one wild cry."

Other parts of the world—the bleak shores and isles of Lapland, Siberia, Spitzbergen, Nova Zembla, Iceland, Greenland, &c. with the vast sweep of the Arctic Zone, are also enlivened in their seasons by swarms of sea-fowl, which range the intervening open parts of the seas to the shoreless frozen ocean. There a barrier is put to further enquiry, beyond which the prying eye of man must not look, and there his imagination only must take the view, to supply the place of reality. In these forlorn regions of *unknowable* dreary space,

this reservoir of frost and snow, where firm fields of ice, the accumulations of centuries of winters, glazed in Alpine heights above heights, surround the pole, and concentre the multiplied rigours of extreme cold; even here, so far as human intelligence has been able to penetrate, there appears to subsist an abundance of animals, in the air, and in the waters: and, perhaps, it may not be carrying conjecture too far to suppose, that every region of the earth, air, and water, however ungenial the clime may appear to us, is replete with animals, suited, each kind, to the place assigned to it.

Certain it is, however, that the deeps of the frozen zone are the great receptacle whence the finny tribes issue, in so wonderful a profusion, to restock all the watery world of the northern hemisphere; and that this immense icy protuberance of the globe, this gathering together, this hoard of congealed waters, is periodically diminished by the influence of the unsetting summer's sun, whose rays being perpetually, though obliquely, shed, during that season, on the widely extended rim of the frozen continent, gradually dissolve its margin, which is thus crumbled into innumerable floating isles, that are driven southward to replenish the seas of warmer climates.*

Amidst these drifts of ice, and following this widely spreading current, teeming with life, the whole host of sea-fowl find in the waters an inexhaustible supply of food: for the great movement, the immense southward migration of fishes is then begun, and shoal after shoal, probably as the removal of their dark icy canopy unveils them to the sun, are invited forth, and, guided by its light and heat, poured forward in thousands of myriads, in multitudes which set all calculation at defiance. The flocks of sea birds, for their numbers, baffle

* The same happens in the southern hemisphere, by the melting of the ice at the south pole.

the power of figures;* but the swarms of fishes, as if engendered in the clouds, and showered down like the rain, are multiplied in an incomprehensible degree: they may indeed be called infinite, if infinity were applicable to any thing created. Of all these various tribes of fishes, thus pressing forward on their southern route, that of the Herring is the most numerous. Closely embodied in resplendent columns of many miles in length and breadth, and in depth from the surface to the bottom of the sea, the shoals of this tribe peacefully glide along, and glittering like a huge reflected rainbow, or Aurora Borealis, attract the eyes of all their attendant foes. Other kinds of fishes, in duller garbs, keep also together in bodies, but change their movements as may best suit their different modes of attack or defence, in preying upon, or escaping from each other as they pass along.† All these various tribes of fishes, but particularly that of the Herring, are in their turns encountered and preyed upon by the whole hosts of sea-fowl, which continually watch all their motions. Some are seen to hover over the shoals of fishes, and to wheel about in quick and glancing evolutions, and then to dart down like

* A bird may lay ten eggs and hatch them; but the roe of a herring is said to contain ten thousand.

† "Fishes are the most voracious animals in nature. Many species prey indiscriminately on every thing digestible that comes in their way, and devour not only other species of fishes, but even their own. As a counterbalance to this voracity they are amazingly prolific. Some bring forth their young alive; others produce eggs. The viviparous *Blenny* brings forth 200 or 300 live fishes at a time. Those which produce eggs are all much more prolific, and seem to proportion their stock to the danger of consumption. Lewenhock affirms that the Cod spawns above nine millions in a season. The Flounder produces above one million, and the Mackarel above 500,000. Scarcely one in a hundred of these eggs, however, is supposed to come to maturity: but two wise purposes are answered by this amazing increase; it preserves the species in the midst of numberless enemies, and serves to furnish the rest with a sustenance adapted to their nature."—*Encycl. Britan.*

a falling plummet upon the selected object, which is gliding near the surface of the water, and instantly to rise, and devour the living victim on the wing. Others, equally alert and rapid in their pursuit, plunge and dive after their prey to greater depths; while the less active birds seem content to devour only such of the fishes as have been killed or wounded, and cast out on the flanks, or left in the rear of the main body.

In this great, this wonderful emigration of birds and fishes, it is evident that they are amply provided on their way with an abundance of food, which they derive from each other; and that the shoals of fishes which the sea-fowl attend, are impelled southward by instinct, aided by currents, for the accomplishment of their mission. The birds also, in their progress to fulfil the same high purpose, are by these enticed forward, as it were, to follow the seasons, and to wing their way to the posts assigned them in climes adapted to the fulfilling of the great duties of rearing their young, and of leading them forth to pursue the unalterable course of nature: and thus they spend out the varied year in the same ceaseless traversings on the globe.

Notwithstanding the prodigious multitudes of the inhabitants of the ocean, which are thus destroyed by each other, and by their winged enemies, yet, like a small toll, or like a measure of sand taken from the beach, there is no visible diminution of them; for although many divisions of the larger kinds, by keeping in the mid-sea deeps, escape notice, and are dispersed like the fowl that follow to feed on them; yet others are mixed with the smaller sorts, and form part of those vast shoals which yearly present themselves to man, filling every creek and inlet of the northern shores, particularly those of the British isles; where this wonderful influx appears as if offered to give employment to thousands, and to supply an inexhaustible source of commerce: but this, like other overflowing bounties of Providence, seems to be too little

regarded: the waste, indeed, in this instance, is sufficient to feed half the human race.

It is a melancholy reflection, that, from man, downwards, to the smallest living creature, all are found to prey upon and devour each other. The philosophic mind, however, sees this waste of animal life again and again repaired by fresh stores, ever ready to supply the void, and the great work of generation and destruction perpetually going on, and to this dispensation of an all-wise Providence, so interesting to humanity, bows in awful silence.

In returning from these digressions to the subject of the present enquiry, let the imagination picture to itself countless multitudes of birds, wafted like the clouds, around the globe, which in ceaseless revolutions turns its convexities to and from the sun, causing thereby a perpetual succession of day and night, summer and winter, and these migrators will be seen to follow its course, and to traverse both hemispheres from pole to pole. To those, who, contemplating this world of wonders, extend their views beyond the common gropings of mankind, it will appear, that Nature, ever provident that no part of her empire should be unoccupied, has peopled it with creatures of various kinds, and filled every corner of it with animation. To follow her into all her recesses would be an endless task; but so far as these have been explored, every step is marked with pleasantness: and while the reflecting mind, habituated to move in its proper sphere, breaks through the trammels of pride, and removes the film of ignorance, it soars with clearer views towards perfection, and adores that Infinite Wisdom which appointed and governs the unerring course of all things.

....." Thus the men,
" Whom Nature's works can charm, with God himself
" Hold converse; grow familiar day by day
" With his conceptions; act upon his plan,
" And form to his the relish of their souls."

Akenside's Pleasures of Imagination, Book 3, l. 630.

CONTENTS OF THE SECOND VOLUME.

	PAGE.
1 Sanderling -	19
2 Long-legged Plover	21
Of the Oyster-catcher	23
1 Oyster-catcher -	*ib.*
1 Water Crake -	25
2 Water Rail -	28
1 Water Ouzel -	30
1 Kingfisher -	33
Of the Spoonbill -	37
1 Spoonbill -	38
Of the Crane - -	41
1 Crane - -	42
2 Stork - - -	44
Of the Heron -	47
1 Heron - -	48
2 Great White Heron	52
3 Night Heron	53
4 Egret - -	55
5 Bittern -	57
6 Little Bittern -	60
Of the Curlew -	62
1 Curlew - -	63
2 Whimbrel -	65
Of the Snipe -	67
1 Woodcock -	68
2 Great Snipe -	73
3 Common Snipe	75
4 Judcock - -	79

	PAGE.
5 Knot - -	81
Of the Godwit -	83
1 Godwit - -	84
2 Red Godwit -	85
3 Cinereous Godwit	87
4 Cambridge Godwit	88
5 Lesser Godwit	*ib.*
6 Greenshank -	89
7 Spotted Redshank	90
8 Redshank -	91
Of the Sandpiper - -	94
1 Ruff - -	95
2 Shore Sandpiper	99
3 Green Sandpiper	100
4 Gambet -	102
5 Ash-coloured Sandpiper - -	*ib.*
6 Common Sandpiper	104
7 Brown Sandpiper	106
8 Greenwich Sandpiper -	*ib.*
9 Black Sandpiper	107
10 Spotted Sandpiper	108
11 Red-legged Sandpiper - -	109
12 Red Sandpiper	112
13 Dunlin - -	113
14 Purre - -	115
15 Little Stint -	118
1 Turnstone -	119
2 Turnstone (*morinella*) -	121
1 Water Hen -	123
Of the Coot -	126
1 Coot - -	127
2 Greater Coot -	130
Of the Phalarope -	131
1 Red Phalarope	*ib.*
2 Grey Phalarope	132
Of the Grebe -	134
1 Great-crested Grebe	136
2 Tippet Grebe	138
3 Eared Grebe	140
4 Dusky Grebe	142
5 Red-necked Grebe	143
6 Little Grebe -	145
7 Black-chin Grebe	146
Of the Avoset -	147
1 Avoset - -	148
Of the Auk or Penguin	150
1 Great Auk -	151
2 Razor-Bill -	153
3 Black-billed Auk	155
4 Puffin -	156
5 Little Auk -	159

	PAGE.
Of the Guillemot -	161
1 Guillemot -	162
2 Lesser Guillemot	164
3 Black Guillemot	166
4 Spotted Guillemot	167
Of the Divers -	168
1 Great Northern Diver -	169
2 Imber - -	171
3 Lesser Imber -	173
4 First Speckled Diver - -	174
5 Second Speckled Diver -	176
6 Red-throated Diver	178
7 Black-throated Diver - -	179
Of the Terns or Sea Swallows -	181
1 Common Tern	182
2 Lesser Tern -	184
3 Black Tern -	185
4 Sandwich Tern	186
5 *Sterna nævia* -	188
6 Brown Tern	189
Of the Gull -	190
1 Black-backed Gull	192
2 Herring Gull	194
3 Wägel -	196
4 Common Gull	198
5 Winter Gull	200
6 Black-headed Gull	201
7 Brown-headed Gull -	204
8 *La petite mouette grise* -	206
9 Kittiwake -	207
10 Tarrock -	208
11 Skua Gull -	210
12 Black-toed Gull	213
13 Arctic Gull	215
Of the Petrel -	217
1 Fulmar -	219
2 Shearwater -	221
3 Stormy Petrel	224
Of the Mergus -	227
1 Goosander -	229
2 Dun-diver -	232
3 Red-breasted Merganser - -	236
4 Smew - -	239
5 Red-headed Smew	241
6 Lough-diver -	242
Of the Anas -	244
1 Wild Swan -	246
2 Mute Swan -	250
3 Swan Goose -	254
4 Canada Goose	256
5 Egyptian Goose	259
6 Red-breasted Goose	261

		PAGE.
7	Grey Lag Goose	263
8	Tame Goose	267
9	White-fronted Wild Goose	273
10	Bean Goose -	274
11	Bernacle -	275
12	Brent Goose	278
13	Eider Duck -	280
14	Musk Duck	285
15	Velvet Duck	287
16	Scoter -	289
17	Mallard -	292
18	Tame Duck -	300
19	Hook-billed Duck	304
20	Scaup Duck	305
21	Shieldrake, -	307
22	Shoveler -	311
23	Red-breasted Shoveler -	314
24	Gadwall -	315
25	Wigeon -	317
26	Bimaculated Duck	320
27	Pochard - -	321
28	Ferruginous Duck	324
29	Pintail Duck	325
30	Long-tailed Duck	328
31	Golden-eye -	331
32	Morillon -	334
33	Tufted Duck	335
34	Garganey -	337
35	Teal - -	339

Of the Pelican - 342
1 Corvorant - 344
2 Crested Corvorant 350
3 Shag - - 352
4 Gannet - 355

THE SANDERLING.

TOWILLEE, OR CURWILLET.

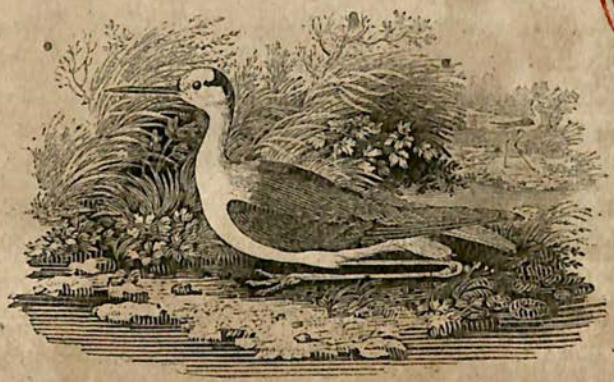
(Charadrius Calidris, Lin.—*Maubeche*, Buff.)

This bird weighs almost two ounces; is about eight inches in length, and fifteen in breadth, from tip to tip. The bill is an inch long, slender, black and grooved on the sides nearly from the tip to the nostril; the brow to the eyes white; the rest of the head pale ash colour, mottled in brown streaks from the forehead to the hinder part of the neck, and on each side of the upper part of the breast; back, scapulars, and greater coverts,

brownish ash, edged with dull white, and irregularly marked with dark brown spots. The pinions, lesser coverts, and bastard wings, dark brown; the quills, which extend beyond the tail, are of the same colour on their exterior webs and points, except four of the middle ones, which are white on the outer webs, forming, when the wing is closed, a sharp wedge-shaped spot; inner webs brownish ash; the secondary quills are brown, tipped with white; the rump and tail coverts are also brown, edged with dirty white; the tail feathers brownish ash, edged with a lighter colour, the two middle ones much darker than the rest; the throat, fore part of the neck, the breast, belly, thighs and vent, are white; the toes and legs black, and bare a little above the knees. This bird is of a slender form, and its plumage has a hoary appearance among the Stints, with which it associates on the sea-shore, in various parts of Great Britain. It wants the hinder toe, and has, in other respects, the look of the Plover and Dotterel, to which family it belongs.

Latham says, this bird, like the Purre, and some others, varies considerably, either from age or the season; for those he received in August, had the upper parts dark ash coloured, and the feathers deeply edged with a ferruginous colour; but others sent him in January were of a plain dove-coloured grey; they differed also in some other trifling particulars.*

* The specimen from which this drawing and description were taken, was furnished by the Rev. H. Cotes, of Bedlington; and it is the only one which the author has had an opportunity of examining.



THE LONG-LEGGED PLOVER.

LONG SHANKS, OR LONG LEG.

(*Charadrius himantopus*, Lin.—*L'Echasse*, Buff.)

Its slender black bill is two inches and a half long, from the tip of which to the end of the tail it measures only about thirteen inches; but to the toes a foot and a half. The wings are long, measuring, from tip to tip, twenty-nine inches; irides red; the crown of the head, the back and wings, of a glossy black; tail light grey, except the two outside feathers, which are white; as are all the other parts of its plumage, except a few dusky spots on the back of the neck. Its long, weak, and disproportionate legs are of a blood red, and measure, from the foot to the upper naked part of the thigh, about eight inches; the toes are short, and the outer and middle ones are connected by a membrane at the base.

Ornithologists mention only a few instances of this

singularly-looking species having been met with in Great Britain;* but it is common in other countries.

Latham says, "it is common in Egypt,† being found there in the marshes in October; its food is said to consist principally of flies. It is likewise plentiful about the Salt Lakes, and often seen on the shores of the Caspian Sea, as well as by the rivers which empty themselves into it; and in the southern deserts of Independent Tartary: we have also seen it in Chinese paintings; and it is known at Madras, in the East Indies." It is also often met with in the warmer parts of America; is sometimes seen as far north as Connecticut, and also in Jamaica.

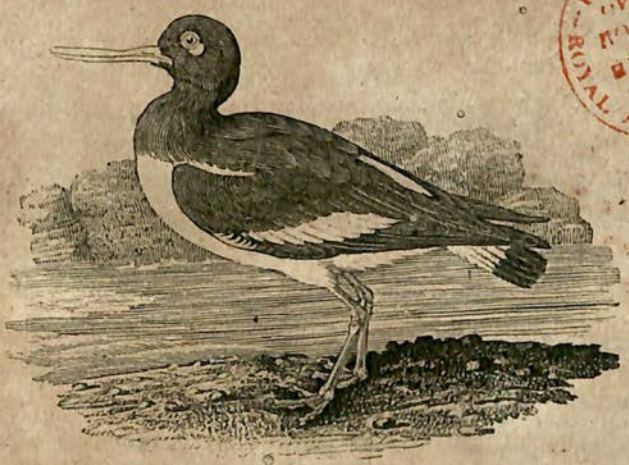
* Sir Robert Sibbald makes mention of two that were shot in Scotland—Pennant of one that was shot near Oxford—and of five others which were shot in Frincham pond in Surrey.

† Pliny says it is a native of Egypt.

OF THE OYSTER-CATCHER.

Its bill is long, compressed and cuneated at the end; nostrils linear; tongue scarcely a third of the length of the bill; toes, three in number, all placed forwards, the exteriors united to the middle by a strong membrane, as far as the first joint.

This separate and single genus of birds, though no where numerous, is widely dispersed over the globe, being met with in every country which travellers have visited.



THE OYSTER-CATCHER.

PIED OYSTER-CATCHER, SEA-PIE, OR OLIVE.

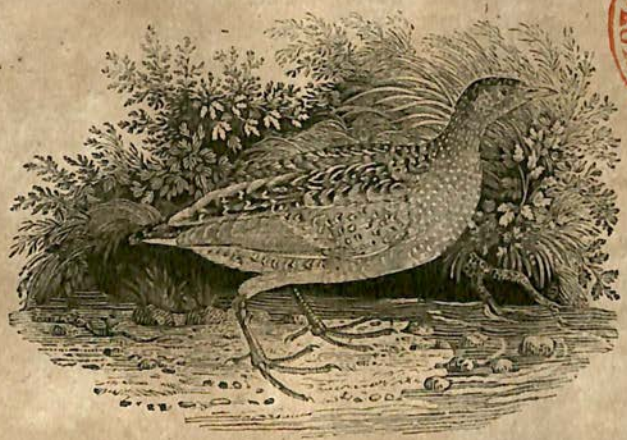
(*Hæmatopus ostralegus*, Lin.—*L'Hutrier*, Buff.)

The Oyster-catcher generally weighs about sixteen ounces, measures seventeen inches in length, and is two feet eight inches in breadth. The bill is of a bright

scarlet, about three inches long, wide at the nostrils, and grooved beyond them nearly half its length; thence to the tip it is vertically compressed on the sides, and ends obtusely: with this instrument, which, in its shape and structure, is peculiar to this bird, it easily disengages the limpets from the rocks, and plucks out the oysters from their half-opened shells: on these it feeds, as well as on other kinds of shell-fish, sea-worms, and insects. The irides are of a lake-coloured red; orbits orange; under eye-lids white, and (in many specimens) a crescent-shaped stroke of this colour crosses the throat; the head, neck, upper part of the back, the scapulars, lesser coverts of the wings and end of the tail are black; the quills, in some are of a dark brown, striped less or more in the middle and in the inner webs with white: the secondary quills are white towards their base, and the uncovered points black, narrowly edged with white; the breast, belly, vent, upper half of the tail, lower part of the back and the greater wing coverts are white: the legs and feet are of a pale red, short and strong; the toes, three in number, are each surrounded with a membraneous edge, and covered with a hard scaly skin, which enables the bird to climb and traverse the rough and sharp shell-covered rocks, in quest of prey, without injury.

Although the Oyster-catcher is not provided with powers fitted for an expert swimmer, yet it does not shew any aversion to taking the water, upon which it may be said to float rather than swim. These birds are the constant inhabitants of the sea-shores, and are seldom found inland. In winter they assemble in flocks, are then shy and wild, and are seen in pairs only in the breeding season and in the summer. The female deposits her eggs in

an open and dry situation, out of tide mark, sheltered merely by a tuft of bent grass, without any other nest than the bare sand and fragments of shells, blown thither by the wind. She lays four or five eggs of a greenish grey colour, spotted with black, which she leaves during the day exposed to the influence of the sun, and is careful to sit upon them herself only during the night and in bad weather. The young ones may easily be tamed, and will associate with domestic poultry.



THE WATER CRAKE.

SPOTTED RAIL, LESSER SPOTTED WATER RAIL, SKITTY, OR SPOTTED GALLINULE.

(*Rallus Porzana*, Lin.—*La Marouette*, Buff.)

This bird weighs above four ounces, and measures nearly nine inches in length, and about fifteen in breadth. The bill is of a greenish yellow, and not more than three quarters of an inch long. The top of the head to the nape is dusky, slightly streaked with rusty brown; a brown and

white mottled stripe passes from the bill over and behind the eyes; the cheeks and throat are of a freckled dull grey. The neck and breast are olive, marked with small white spots; the sides dusky and olive, crossed with bars of white, and the under parts are a mixture of cinereous dirty white and yellow. The colour of the plumage of all the upper parts is dusky and olive brown, spotted, edged, barred or streaked with white; the spots on the wing coverts are surrounded with black, which gives them a studded or pearly appearance; and the white bars and streaks on the scapulars and tertials form a beautiful contrast to the black ground of the feathers on these parts. The legs are of a yellowish green. The Water Crake in its figure and general appearance, though much less, is extremely like the Corn Crake or Land Rail; but its manners and habits are very different. Its common abode is in low swampy grounds, in which are pools or streamlets, overgrown with willows, reeds, and rushes, where it lurks and hides itself with great circumspection: it is wild, solitary, and shy, and will swim, dive, or skulk under any cover; and, it is said, will sometimes suffer itself to be knocked on the head, rather than rise before the sportsman and his dog. The species is very scarce in Great Britain, and from its extreme vigilance it is rarely to be seen. It is supposed to be migratory here, as well as in France and Italy, where it is found early in the spring; it is also met with in other parts of Europe, but no where in great numbers. The conformation of its nest is curious: it is made of rushes and other light buoyant materials, woven and matted together, so as to float on, and to rise or fall with the ebbing or flowing of the water, like a boat; and to prevent its being swept

away by floods, it is moored or fastened to the pendant stalk of one of the reeds, by which it is skreened from the sight, and sheltered from the weather. The female lays from six to eight eggs. The young brood do not long require the fostering care of the mother, but as soon as they are hatched, the whole of the little black shapeless family scramble away from her, take to the water, separate from each other, and shift for themselves. The flesh is said to have a fine and delicate flavour, and is esteemed by epicures a delicious morsel.

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THE WATER RAIL.

BILCOCK, VELVET RUNNER, OR BROOK OUZEL.

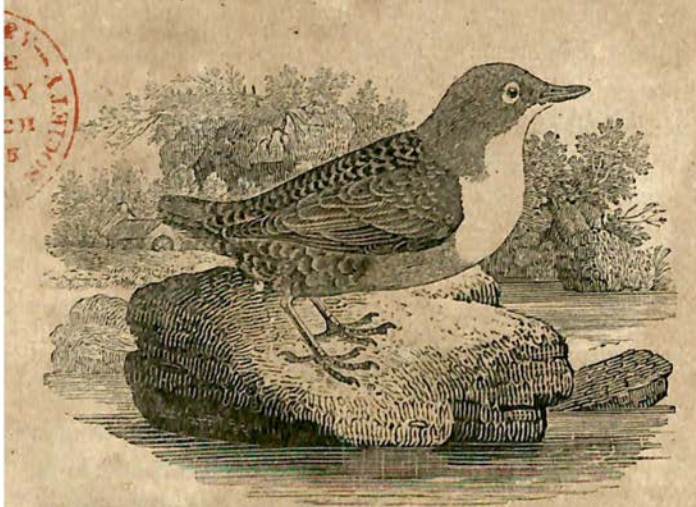
(*Rallus aquaticus*, Lin.—*Le Rale d'Eau*, Buff.)

This bird, though a distinct genus of itself, has many traits in its character very similar to both the Corn Crake and the Water Crake: it is migratory, like the former, to which it also bears some resemblance in its size, in its long shape, and in the flatness of its body; its haunts and manner of living are nearly the same as those of the latter; but it differs from both in the length of its bill, and in its plumage. It weighs about four ounces and a half, and measures twelve inches in length and sixteen in breadth. The bill is slightly curved, and one inch and three quarters long; the upper mandible is dusky, edged with red; the under reddish orange; the irides red. The top of the head, hinder part of the neck, the back, scapulars, coverts of the wings, and tail, are black, edged with dingy brown; the ridge of the wings is white, the bastard wing barred with white, the inside barred

with brown and white, and the quills and secondaries dusky; the side feathers are beautifully crossed with black and white, and slightly tipped with pale reddish brown. The inner side of the thighs, the belly, and the vent are pale brown, and in some specimens, speckled with bluish ash. The sides of the head, the chin, fore part of the neck, and the breast, are of a dark hoary lead colour, slightly tinged with pale rufous. The tail consists of twelve short black feathers, edged and tipped with dirty red; some of those on the under side barred with black and white. The legs, which are placed far behind, are a dull dirty red; the toes long, and without any connecting membrane. Latham says, "the eggs are more than an inch and a half long, of a pale yellowish colour, marked all over with dusky brown spots, nearly equal in size, but irregular."

The Water Rail is a shy and solitary bird. Its constant abode is in low wet places, much overgrown with sedges, reeds, and other coarse herbage, among which it finds shelter, and feeds in hidden security. It runs, occasionally flirting up its tail, through its tracts, with the same swiftness as the Corn Crake runs through the meadows and corn fields, shews as great an aversion to take flight as that bird, and has more of the means in its power of disappointing the sportsman. It generally exhausts his patience, and distracts and misleads his dog, by the length of time to which it can protract its taking wing; and it seldom rises until it has crossed every pool, and run through every avenue within the circuit of its retreats. It is, however, easily shot when once flushed, for it flies but indifferently, with its legs dangling down while on the wing. This bird is not very common in Great Britain, but is said to be numerous in the marshes

of the northern countries of Europe, whence, partially and irregularly, it migrates southward, even into Africa, during the severity of the winter season. Buffon says "they pass Malta in the spring and autumn," and to confirm this, adds, "that the Viscount de Querhoënt saw a flight of them at the distance of fifty leagues from the coasts of Portugal on the 17th of April, some of which were so fatigued that they suffered themselves to be caught by the hand." The flesh of the Water Rail is not so generally esteemed as that of the Land Rail, and yet by many it is thought rich and delicious eating.



THE WATER OUZEL.

WATER CROW, DIPPER, OR WATER PIOT.

(Sturnus Cinclus, Lin.—*Le Merle d'Eau*, Buff.*)*

THE length of the Water Ouzel is about seven inches and a half from the point of the beak to the end of its tail, which is very short, and gives the bird a thick and

stumpy appearance. The mouth is wide; the bill black, about three quarters of an inch long; the upper mandible rather hollow in the middle, and bent a little downwards at the point; the eye-lids are white, and the irides hazel. The upper parts of the head and of the neck are deepish rusty brown; the back, rump, scapulars, wing coverts, belly, vent, and tail are black; but each feather on these parts is distinctly edged with a hoary grey colour. The breast, fore part of the neck and throat are of a snowy white; and the black and white on the belly and breast are separated by a rusty brown. The legs and toes are short and strong, the scales pale blue, the hinder part and joints brown; the claws are curved, and the toes are distinctly parted, without any membraneous substance between to join them.

This solitary species is removed from the place it has hitherto holden, in all systems, among the land birds: it ought not to be classed any longer with the Ouzels and Thrushes, to which it bears no affinity. Its manners and habits are also different from those birds, and are peculiar to itself. It is chiefly found in the high and mountainous parts of the country, and always by the sides of brooks and rocky rivers, but particularly where they fall in cascades, or run with great rapidity among stones and fragments of broken rocks; there it may be seen perched on the top of a stone in the midst of the torrent, in a continual dipping motion, or short courtsey often repeated, whilst it is watching for its food, which consists of small fishes and insects. The feathers of this bird, like those of the Duck tribe, are impervious to water, whereby it is enabled to continue a long time in that fluid without sustaining the least injury. But the most singular trait in

its character, (and it is well authenticated) is that of its possessing the power of walking, in quest of its prey, on the pebbly bottom of a river, in the same way, and with the same ease, as if it were on dry land. The female makes her nest in the banks of the rivulet, of the same kind of materials, and nearly of the same form, as that of the common Wren, and lays four or five eggs, which are white, lightly blushed with red.

THE KINGFISHER.

(*Alcedo ispida*, Lin.—*Le Martin-pêcheur*, Buff.)

This splendid little bird is of rather a clumsy shape, the head being large in proportion to the size of the body, and the legs and feet very small. In length it is only seven inches, in breadth eleven; and its weight is about two ounces and a quarter. The bill, measured from the corners of the mouth, is two inches long, vertically compressed on the sides, strong, straight, and tapering to a sharp point: the upper mandible is black, fading into a red colour towards the base; the under one, as well as the inside of the mouth, is of a reddish orange: the irides are hazel, inclining to red. A broad stripe passes from the bill over the eye to the hinder part of the neck, of a bright orange colour, but margined on the side of the mouth, and crossed below the eye, by a narrow black stroke, and it is terminated behind the auriculars with a slanting wedge-shaped white spot. The throat is white;

the rest of the head, and the wing coverts are of a deep shining green, spotted with bright light blue; the scapulars and exterior webs of the quills are of the same colour, but without spots. The middle of the back, the rump, and coverts of the tail are of a most resplendent azure: the tail, which consists of twelve short feathers, is of a rich deep blue, and the whole under part of the body of a bright orange. The legs and toes are of a red colour, and are peculiar in their shape and conformation, the three forward toes being unconnected from the claws to the first joints, from whence they appear as if grown into each other; and the inner and hinder ones are placed in a line on the inside of the foot, whereby the heel is widened, and seems pressed out.

It is difficult to conceive why ornithologists have classed the Kingfisher with land birds, as its habits and manner of living are wholly confined to the waters, on the margins of which it will sit for hours together on a projecting twig, or a stone; at one while fluttering its wings, and exposing its brilliant plumage to the sun; at another, hovering in the air, like the Kestril, it waits the moment when it may seize its prey, on which it darts almost unerringly: often it remains for several seconds under the water, before it has gained the object of its pursuit, then brings up the little fish, which it carries to the land, beats to death and swallows.

The female commonly makes her nest by the sides of rivers or brooks, in a hole made by the mole, or the water-rat: this she enlarges or contracts to suit her purpose; and it is conjectured, from the difficulty of finding the nest, that frequently the hole which leads to it is under water.

The author was favoured with a stuffed specimen of this bird, together with its nest and six eggs, by G. W. Wentworth, of Wolley-Hall, near Wakefield, Esq. In the compactness of its form, the nest resembled that of the Chaffinch: it was made entirely of small fish bones, cemented together with a brown glutinous substance. The eggs were of a clear white.

To take notice of the many strange and contradictory accounts of this bird, as well as of its nest, transmitted to us by the ancients,* and to enumerate the properties ascribed to it by the superstitious in all ages, would occupy too large a portion of this work: but the following modern instance seems worthy of notice:—

Dr Heysham, of Carlisle, in his Catalogue of Cumberland Animals, says, "On the 7th of May a boy from Upperby brought me a Kingfisher alive, which he had taken when sitting on her eggs the night before: from him I received the following information:—Having often this spring observed these birds frequent a bank upon the river Peteril, he watched them carefully, and saw them go into a small hole in the bank. The hole was too small to admit his hand, but as it was made in the soft mould, he easily enlarged it. It was upwards of half a

* Their nests are wonderful—of the figure of a ball rather elevated, with a very narrow mouth; they look like a large sponge: they cannot be cut with a knife, but may be broken with a smart stroke: they have the appearance of petrified sea-froth. It is not discovered of what they are formed; some think of Prickly-back bones, since they live upon fish. —*Pliny.*

Aristotle compares the nest to a gourd, and its substance and texture to those sea-balls or lumps of interwoven filaments which are cut with difficulty; but, when dried, become friable.

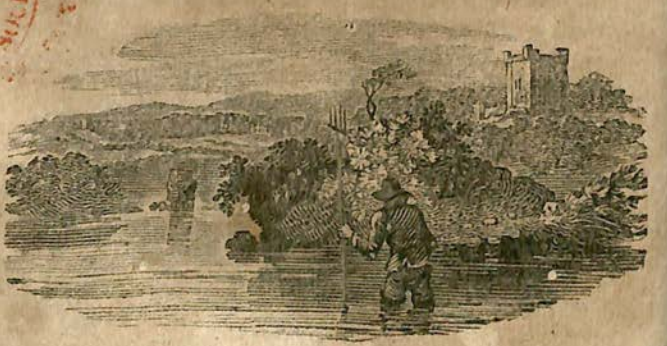
Ælian and *Plutarch* describe it as being made to float on the placid face of the ocean.

yard long; at the end of it the eggs, which were six in number, were placed upon the bare mould, there being not the smallest appearance of a nest." If the boy was correct in his relation to Dr Heysham, it may be concluded that these birds sometimes, from necessity perhaps, build a nest, and sometimes make the dry mould answer that purpose.

Kingfishers are not so numerous as might be expected from the number of eggs found in their nests, owing probably to the young being destroyed by the floods, which must often rise above the level of the holes where they are bred.

Except in the breeding season, this bird is usually seen alone, flying near the surface of the water with the rapidity of an arrow, like a little brilliant meteor, by which appearance the eye is enabled to follow its long-continued course. Considering the shortness of its wings, the velocity with which it flies is surprising.

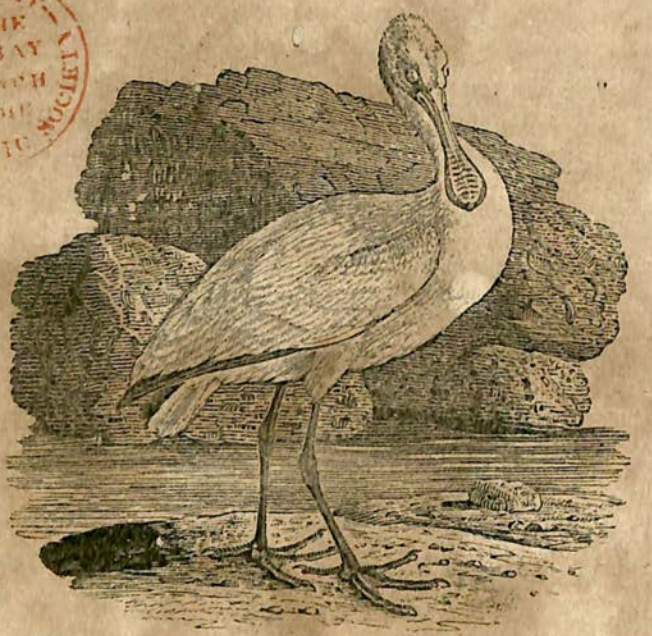
Ornithologists inform us that Kingfishers are found in almost every part of the globe; but it does not appear that more than this one species has ever been seen in Europe.



OF THE SPOONBILL.

The bill is broad, long, flat, and thin, the end widening into a roundish form not unlike a spoon; the nostrils small, and placed near the base; the tongue small and pointed, and the feet semi-palmated.

This genus consists of only three known species, and three varieties, and these are thinly dispersed over various parts of the globe. Their common residence is on the sea-shores, or the contiguous fenny swamps which are occasionally overflowed by the tide, or on such low marshy coasts as are constantly covered with stagnant pools of water. These places they very seldom quit, but they sometimes are seen by the sides of lakes or rivers in the interior parts of the country. They feed on various kinds of little fishes, and small shell-fish, which they swallow whole; also on worms, insects, frogs, and the various other inhabitants of the slimy pools, through which they wade, and search the mud with their curiously constructed bills; and sometimes they eat the weeds, grasses, and roots which grow in those boggy places.



THE SPOONBILL,

OR, WHITE SPOONBILL.

(Platalea leucorodia, Lin.—*La Spatule*, Buff.)

The Spoonbill measures two feet eight inches in length, and is about the bulk of the Common Heron, but its legs and neck are shorter. The whole plumage is white, though some few have been noticed with the quills tipped with black.

The bill, which flaps together not unlike two pieces of leather, is the most striking feature in this bird: it is six inches and a half long, broad and thick at the base, and very flat towards the extremity, where, in shape, it is widened and rounded like the mouth of a mustard

spatula: it is rimmed on the edges with a black border, and terminated with a small downward-bent point or nib. The colour of the bill varies in different birds; in some, the little ridges which wave across the upper bill are spotted, in others stripped with black or brown, and generally the ground colour of both mandibles is in different shades of deeper or lighter yellow: the insides, towards the gape of the mouth, near the edges, are studded with small hard tubercles or furrowed prominences, and are also rough near the extremities of the bill, which enables these birds to hold their slippery prey. A black bare skin extends from the bill round the eyes, the irides of which are grey; the skin which covers the gullet is also black and bare, and is capable of great distention. The feathers on the hinder part of the head are long and narrow, and form a sort of tuft or crest which falls behind. The toes are connected near their junction by webs, which reach the second joint of the outer toe and the first of the inner ones, and slightly border them on each side to their extremities: the feet, legs and bare part of the thighs are covered with a hard and scaly skin of a dirty black colour.

The White Spoonbill migrates northward in the summer, and returns to southern climes on the approach of winter, and is met with in all the intermediate low countries, between the Ferro Isles and the Cape of Good Hope. It is said that they were formerly numerous on the marshes of Severnhuys, near Leyden in Holland. In England they are rare visitants: Pennant mentions that a flock of them migrated into the marshes near Yarmouth in April, 1774.

Like the Rooks and the Herons, they build their nests

on the tops of large trees, lay three or four eggs, the size of those of a Hen, of a white colour, sprinkled with pale red, and are very noisy during the breeding season. The intestines are described as being very long, and the *trachea arteria* is like that of the Crane, and makes a double inflection in the thorax.

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OF THE CRANE.

THE characters by which this genus is distinguished, are a long, strong, straight, sharp-pointed bill, nostrils linear, tongue pointed, the toes connected by a membrane as far as the first joint, and the middle claw of some of the species pectinated. Their thighs are half naked, and their legs long, by which, without wetting their plumage, they are enabled to wade deep in the water, where they stand motionless, awaiting the approach of the unsuspecting finny tribes, and the moment these are within reach, they strike them with their bill, admirably formed for the purpose, with the rapidity of a dart. Their body is slender, and covered with a very thin skin; their wings, which are very large and strong, contain twenty-four quills; and their tails are short. They live mostly in lakes and fens, upon water animals; they also occasionally eat grain and herbage, and they build their nests chiefly upon the ground. Their flesh is savoury.

The Crane differs from the Stork and Heron in the singular conformation of the windpipe, which, "entering far into the breast bone, (which has a cavity to receive it) and being thrice reflected, goes out again at the same hole, and so turns down to the lungs."* It differs from them also in some other particulars, both internally and externally.

* Willoughby.

THE CRANE,

OR, COMMON CRANE.

(Ardea Grus, Lin.—*La Grue*, Buff.)

The bill is about four inches long, straight, pointed, and compressed at the sides, of a greenish black colour, turning lighter towards the point; the tongue is broad and short, and horny at the tip. The forehead, to the middle of the crown, is covered with black hairy down, through which, if the bird be healthy, the skin appears

red; behind this it is nearly bare, and entirely so for the space of about two inches on the nape of the neck, which is ash coloured. The sides of the head behind the eyes, and the hinder part of the neck are white. The space between the bill and the eyes, the cheeks, and the fore part of the neck, are of a blackish ash colour; the greater wing coverts are also blackish, and those farthest from the body, with the bastard wing and quills, are quite black: the rest of its plumage is of a fine waved light ash colour. From the pinion of each wing springs an elegant tuft of loose feathers, curled at the ends, which fall gracefully over the tail, in their flexibility, their position, and their texture, resembling the plumes of the Ostrich. The legs and bare part of the thighs are black. The Crane measures, when extended, from the tip of the bill to the toes, more than five feet in length, and weighs nearly ten pounds; its gait is erect, and its figure tall and slender.

This species is widely spread, and, in its migrations, performs the boldest and most distant journies,

> "Marking the tracts of air, the clamorous Cranes
> "Wheel their due flight, in varied lines descried;
> "And each with out-stretch'd neck his rank maintains
> "In marshall'd order through the ethereal void."

In the summer they spread themselves over the north of Europe and Asia as far as the arctic circle, and in the winter are met with in the warmer regions of India, Syria, Egypt, &c. and at the Cape of Good Hope. The course of their flight is discovered by the loud noise they make, for they soar to such a height as to be hardly visible to the naked eye. Like the Wild Geese, they form

themselves into different figures, describing a wedge, a triangle, or a circle. It is said that they formerly visited the fens and marshes of this island in large flocks, but they have now entirely forsaken it.

THE STORK,

OR, WHITE STORK.

(*Ardea Ciconia*, Lin.—*La Cigogne*, Buff.)

The White Stork is smaller than the Crane, but much larger than the Heron: its length, from the point of the bill to the end of the tail, is three feet six inches; and its breadth, from tip to tip, above six feet. The bill is of a fine red colour, and its length, from the tip to the corners of the mouth, is seven inches; the legs and bare

part of the thighs are also of the same colour; the former below the knees measure eight inches, and the latter five. The plumage is of a bright white, except the quills, greater coverts, and some of the scapulars, which are black; the eyes are dark and full, the orbits bare of feathers, and of a dusky reddish hue. The neck is long and arched; the feathers near the breast, like those of the Heron, are long and pendulous; the secondary quills are nearly of the same length as the primaries, and when the wings are closed, they cover its short tail. The female nearly resembles the male in her plumage and general appearance: her nest is made of dry sticks, twigs, and aquatic plants, sometimes on large trees or the summits of high rocky cliffs: this, however, seldom happens, for the Stork prefers the neighbourhood of populous places, where it finds protection from the inhabitants; who, for ages, have regarded both the bird and its nest as sacred, and commonly place boxes for them on the tops of the houses wherein to make their nests; to which they return after the most distant journies, and every Stork takes possession of his own box. When these are not provided for them, they build on the tops of chimnies, steeples, and lofty ruins.

The Stork lays from two to four eggs, the size and colour of those of a Goose, and the male and female sit upon them by turns. They are singularly attentive to their young, both together never quitting the nest, which is constantly watched by one of them, while the other is seeking for, and bringing provisions, which the young receive with a sort of whistling noise.

The food of the Stork consists of serpents, lizards, frogs, small fish, &c. for which it watches with a keen

eye, on the margins of lakes and pools, and in swamps and marshes. In low countries abounding with places of this description, the Stork is a welcome visitant, and always meets a friendly reception.

In its migrations this bird avoids alike the extremes of heat and cold: in summer it is never seen farther north than Sweden or Russia, and in winter it is not known to venture further southward than Egypt, where it is constantly seen during that season: in the intermediate countries, both in Asia and Europe, it is common in the temperate seasons of the year.

Before the Storks take their departure from their northern summer residence, they assemble in large flocks, and seem to confer on the plan of their projected route. Though they are very silent at other times, on this occasion they make a singular clattering noise with their bills, and all seems bustle and consultation. It is said that the first north wind is the signal for their departure, when the whole body become silent, and move at once, generally in the night, and, taking an extensive spiral course, they are soon lost in the air.*

The Stork is now seldom seen in Britain: Wallis, in his History of Northumberland, mentions one which was killed near Chollerford-bridge, in the year 1766. Its skin was nailed up against the wall of the inn at that place, and drew crowds of people from the adjacent parts to view it. The foregoing figure was taken from a stuffed specimen in the Wycliffe museum.

* "The Stork in the heavens knoweth her appointed times; and the Turtle and the Crane, and the Swallow observe the time of their coming." *Jeremiah* viii. 7.

OF THE HERON.

Some ornithologists have separated this tribe from the Cranes and the Storks, and from the difference observable in the conformation of their parts, consider them as a distinct genus: others, preferring the Linnæan system, class the whole together, and thus make them amount to above eighty distinct species, besides varieties, widely distributed over various parts of the globe, all differing in their size, figure, and plumage, and with talents adapted to their various places of residence, or their peculiar pursuits. But notwithstanding the difference in the colours of their plumage and their bills, the manners of all are nearly the same, as is also their character, which is stigmatized with cowardice and rapacity, indolence, and yet insatiable hunger: they are, indeed, excessively voracious and destructive; but from the meagre-looking form of their bodies, to an inaccurate observer, the greatest abundance might seem insufficient for their support.

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THE HERON.

COMMON HERON, HERONSEWGH, OR HERONSHAW.

(*Ardea Major*, Lin.—*Le Heron hupé*, Buff.)

ALTHOUGH the Heron is of a long, lank, awkward shape, yet its plumage gives it on the whole an agreeable appearance; but when stripped of its feathers, it looks as if it had been starved to death. It seldom weighs more than between three and four pounds, notwithstanding it measures about three feet in length, and in the breadth of its wings, from tip to tip, above five. The bill is six inches long, straight, pointed, and strong, and its edges are thin and slightly serrated; the upper mandible is of a yellowish horn colour, darkest on the ridge; the under one yellow. A bare skin, of a greenish colour, is extended from the beak beyond the eyes, the irides of which

are yellow, and give them a fierce and piercing aspect. The brow and crown of the head are white, bordered above the eyes by black lines which reach the nape of the neck, where they join a long flowing pendent crest of the same colour. The upper part of the neck, in some, is white, in others pale ash; the fore part, lower down, is spotted with a double row of black feathers, and those which fall over the breast are long, loose, and unwebbed; the shoulders and scapular feathers are also of the same kind of texture, of a grey colour, generally streaked with white, and spread over its down-cloathed back. The ridge of the wing is white, coverts and secondaries lead colour, bastard wings and quills of a bluish black, as are also the long soft feathers which take their rise on the sides under the wings, and, falling down, meet at their tips, and hide all the under parts: the latter, next the skin, are covered with a thick, matted, dirty white down, except about the belly and vent, which are almost bare. The tail is short, and consists of twelve feathers of a cinereous or brownish lead colour: the legs are dirty green, long, bare above the knees, and the middle claw is jagged on the inner edge.

The female has not the long flowing crest, or the long feathers which hang over the breast of the male, and her whole plumage is more uniformly dull and obscure. In the breeding season they congregate in large societies, and, like the Rooks, build their nests on trees, with sticks, lined with dried grass, wool, and other warm materials. The female lays from four to six eggs, of a pale greenish blue colour.*

* "A remarkable circumstance, with respect to these birds, occurred not long ago, at Dallam Tower, in Westmoreland, the seat of Daniel Wilson, Esq.

The Heron is described by Buffon as exhibiting the picture of wretchedness, anxiety, and indigence; condemned to struggle perpetually with misery and want, and sickened by the restless cravings of a famished appetite, &c. However faithful this ingenious naturalist may have been in pourtraying the appearance of the Heron, yet others are not inclined to adopt his sentiments in describing its habits and manners, or to agree with him in opinion that it is one of the most wretched of animated beings. It is probable that it suffers no more than other birds, many species of which employ equal attention in looking for their prey; and it is not unlikely that the

"There were two groves adjoining to the park: one of which, for many years, had been resorted to by a number of Herons, which there built and bred; the other was one of the largest rookeries in the country. The two tribes lived together for a long time without any disputes. At length the trees occupied by the Herons, consisting of some very fine old oaks, were cut down in the spring of 1775, and the young brood perished by the fall of the timber. The parent birds immediately set about preparing new habitations, in order to breed again; but, as the trees in the neighbourhood of their old nests were only of a late growth, and not sufficiently high to secure them from the depredation of boys, they determined to effect a settlement in the rookery. The Rooks made an obstinate resistance; but, after a very violent contest, in the course of which many of the Rooks, and some of their antagonists, lost their lives, the Herons at last succeeded in their attempt, built their nests, and brought out their young.

"The next season the same contests took place, which terminated like the former, by the victory of the Herons. Since that time peace seems to have been agreed upon between them: the Rooks have relinquished possession of that part of the grove which the Herons occupy; the Herons confine themselves to those trees they first seized upon, and the two species live together in as much harmony as they did before their quarre'." *Heysham.*

Heron derives pleasure from it instead of pain. This bird, however, is of a melancholy deportment, a silent and patient creature; and will, in the most severe weather, stand motionless a long time in the water, fixed to a spot, in appearance like the stump or root of a tree, waiting for its prey, which consists of frogs, water-newts, eels, and other kinds of fish; and it is also said that it will devour field-mice.

The Heron traverses the country to a great distance in quest of some convenient or favourite fishing spot, and in its aerial journies soars to a great height, to which the eye is directed by its harsh cry, uttered from time to time while on the wing. In flying it draws the head between the shoulders, and the legs stretched out, seem, like the longer tails of some birds, to serve the office of a rudder. The motion of their wings is heavy and flagging, and yet they get forward at a greater rate than would be imagined.

In England Herons were formerly ranked among the royal game, and protected as such by the laws; and whoever destroyed their eggs was liable to a penalty of twenty shillings for each offence. Heron hawking was at that time a favourite diversion among the nobility and gentry of the kingdom, at whose tables this bird was a favourite dish, and was as much esteemed as Pheasants and Peacocks.

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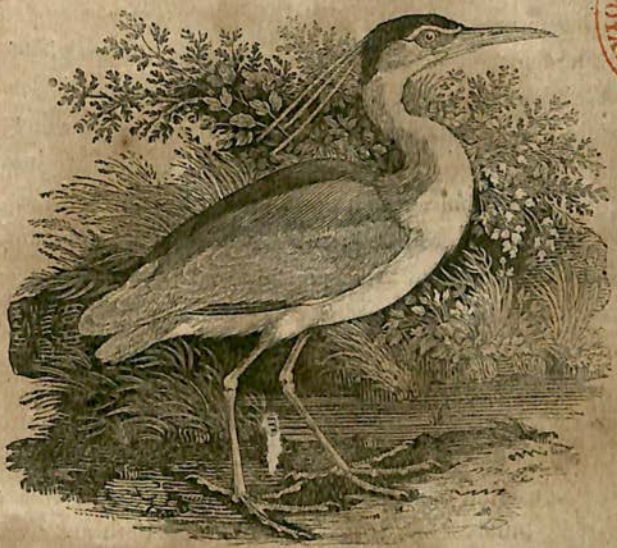
THE GREAT WHITE HERON.

(*Ardea alba*, Lin.—*Le Heron blanc*, Buff.)

THE great white Heron is of nearly the same bulk as the common Heron, but its legs are longer. It has no crest, and its plumage is wholly white, its bill yellow, and its legs black.

Its character and manner of living are the same as those of the common Heron, and it is found in the same countries, though this species is not nearly so numerous. It has rarely been seen in Great Britain. Pennant, in his Arctic Zoology, says it is found in the Russian dominions, about the Caspian and Black Seas, the lakes of Great Tartary, and the river Irtisch, and sometimes as far north as latitude 53. Latham says, it is met with at New York, in America, from June to October; at different seasons of the year it is found in Jamaica, and in the Brazils: and our circumnavigators have met with it at New Zealand.



THE NIGHT HERON.

LESSER ASH-COLOURED HERON, OR NIGHT RAVEN.

(*Ardea nycticorax*, Lin.—*Le Bihoreau*, Buff.)

THE length of this bird is about twenty inches. The bill is three inches and three quarters long, slightly arched, strong, and black, inclining to yellow at the base; the skin from the beak round the eyes is bare, and of a greenish colour; irides yellow. A white line is extended from the beak over each eye; a black patch, glossed with green, covers the crown of the head and nape of the neck, from which three long narrow white feathers, tipped with brown, hang loose and waving: the hinder part of the neck, coverts of the wings, the sides and tail, are ash coloured; throat white; fore part of the neck,

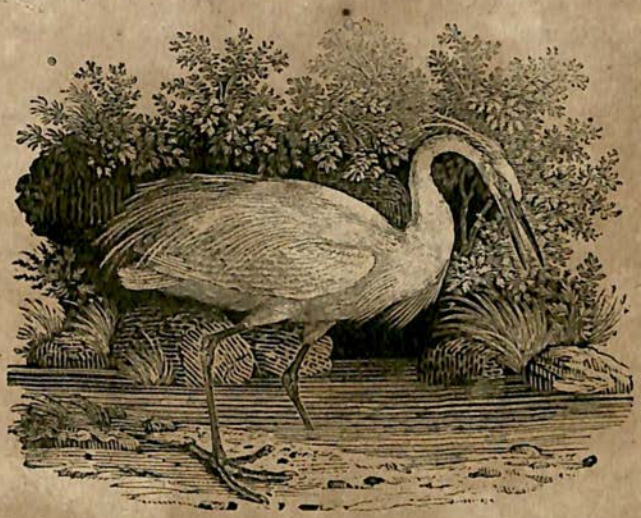
breast and belly yellowish white or buff; the back black; the legs a greenish yellow.

The female is nearly of the same size as the male, but she differs considerably in her plumage, which is less bright and distinct, being more blended with clay or dirty white, brown, grey, and rusty ash colour, and she has not the delicate plumes which flow from the head of the male.

The Night Heron frequents the sea-shores, rivers, and inland marshes, and lives upon insects, slugs, frogs, reptiles, and fish. It remains concealed during the day, and does not roam abroad until the approach of night, when it is heard and known by its rough, harsh, and disagreeable cry, which is by some compared to the noise made by a person straining to vomit. Some ornithologists affirm that the female builds her nest on trees, others that she builds it on rocky cliffs: probably both accounts are right. She lays three or four white eggs.

This species is not numerous, although widely dispersed over Europe, Asia, and America.

The above figure was taken from a stuffed specimen in the Wycliffe museum, and is the only one the author has seen. The bird is indeed very uncommon in this country. Latham mentions one in the Leverian museum, which was shot not many miles from London, in May, 1782.



THE EGRET.

(Ardea Garzette, Lin.—*Egretta*, Buff.*)*

THE Egret is one of the smallest, as well as the most elegant of the Heron tribe: its shape is delicate, and its plumage as white as snow; but what constitute its principal beauty are the soft, silky, flowing plumes on the head, breast, and shoulders: they consist of single slender shafts, thinly set with pairs of fine soft threads, which float on the slightest breath of air. Those which arise from the shoulders are extended over the back, and flow beyond the tail. These plumes were formerly used to decorate the helmets of warriors: they are now applied to a gentler and better purpose, in ornamenting the head-dresses of the European ladies, and the turbans of the Persians and Turks.

The Egret seldom exceeds a pound and a half in weight, and rarely a foot and a half in length. A bare green skin is extended from the beak to the eyes, the irides of which are pale yellow: the bill and legs are black. Like the common Heron they perch and build their nests on trees, and live on the same kinds of food.

This species is found in almost every temperate and warm climate, and must formerly have been plentiful in Great Britain, if it be the same bird as that mentioned by Leland in the list or bill of fare prepared for the famous feast of Archbishop Nevil, in which one thousand of these birds were served up. No wonder the species has become nearly extinct in this country!

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THE BITTERN.

BOG-BUMPER, BITTER-BUM, OR MIRE-DRUM.

(*Ardea Stellaris*, Lin.—*Le Butor*, Buff.)

THE Bittern is nearly as large as the common Heron; its legs are stronger, body more plump and fleshy; and its neck is more thickly cloathed with feathers. The beak is strong at the base, straight, sharp on the edges, and gradually tapers to an acute point; the upper mandible is brown, the under inclining to green; the mouth is wide, the gape extending beyond the eyes, with a dusky patch at each angle: the irides are yellow. The crown of the head is somewhat depressed, and covered

with long black feathers; the throat is yellowish white, the sides of the neck pale rust colour, variegated with black, in spotted, waved, and narrow transverse lines, and on the fore part the ground colour is whitish, and the feathers fall down in less broken and darker lengthened stripes. These neck feathers, which it can raise and depress at pleasure, are long and loose, and inclining backward, cover the neck behind; those below them on the breast, to the thighs, are streaked lengthwise with black, edged with yellowish white: the thighs, belly, and vent are of a dull pale yellow, clouded with dingy brown. The plumage on the back and wings is marked with black zigzag lines, bars and streaks, upon a ground shaded with rust colour and yellow. The bastard wings, greater coverts, and quills are brown, barred with black. The tail, which consists only of ten feathers, is very short: the legs are of a pale green, bare a little above the knees; the claws, particularly those on the hind toes, are long and sharp, the middle ones serrated.

The female is less than the male; her plumage is darker, and the feathers on her head, breast, and neck are shorter, and the colours not so distinctly marked. She makes an artless nest, composed chiefly of the withered stalks and leaves of the high coarse herbage, in the midst of which it is placed, and lays from four to six eggs of a greenish white colour.

The Bittern is a shy solitary bird; it is never seen on the wing in the day time, but sits, commonly with the head erect, hid among the reeds and rushes in the marshes, where it always takes up its abode, and from whence it will not stir, unless it is disturbed by the sportsman. When it changes its haunts, it removes in the

dusk of the evening, and then rising in a spiral direction, soars to a vast height. It flies in the same heavy manner as the Heron, and might be mistaken for that bird, were it not for the singularly resounding cry which it utters from time to time while on the wing; but this cry is feeble when compared to the hollow booming noise* which it makes during the night time, in the breeding season, from its swampy retreats.

The Bittern, when attacked by the Buzzard, or other birds of prey, defends itself with great courage, and generally beats off such assailants; neither does it betray any symptoms of fear, when wounded by the sportsman, but eyes him with a keen undaunted look, and when driven to extremity, will attack him with the utmost vigour, wounding his legs, or aiming at his eyes with its sharp and piercing bill. It was formerly held in much estimation at the tables of the great, and is again recovering its credit as a fashionable dish.

This bird lives upon the same water animals as the Heron, for which it patiently watches, unmoved, for hours together.

* "The Bittern booms along the sounding marsh,
"Mixt with the cries of Heron and Mallard harsh."

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THE LITTLE BITTERN.

(*Ardea minuta*, Lin.—*Le Blongios*, Buff.)

This bird, in the bulk of its body, is not much bigger than the Throstle, measuring only about fifteen inches in length. From the corners of the mouth, a black stroke extends along the under sides of the cheeks; and a patch of black, glossed with green and edged with chesnut, covers the crown of its head. On the back, rump, and scapulars, the feathers are dark brown, edged with pale rusty-coloured red; the sides of the neck, and the breast, are of the same colours, but the brown on the middle of each feather is in narrower streaks. The belly is white; the hinder part of the neck is bare, but the long feathers on the fore part lie back and cover it. The tail is short,

and of a black green colour, edged and tipped with tawny: the legs dirty green. The Little Bittern has seldom been met with in Great Britain.

The above drawing and description were taken from an ill-stuffed specimen in the Wycliffe museum.

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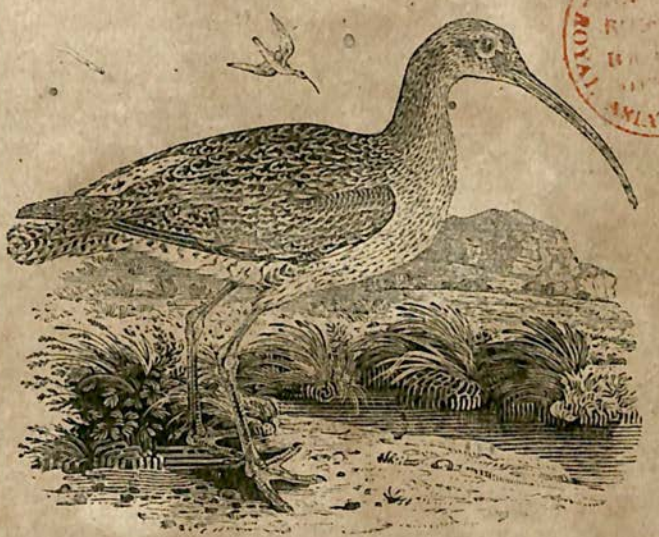
OF THE CURLEW.

THE bill is long, equally incurvated, and terminated in a blunt point; nostrils linear, and longitudinal near the base; tongue short and sharp pointed; and the toes are connected as far as the first joint by a membrane.

With the Curlew, Linnæus begins a numerous tribe of birds under the generic name of *Scolopax*, which, in his arrangement, includes all the Snipes and Godwits, amounting, according to Latham, to forty-two species and eight varieties, spread over various parts of the world, but no where very numerous.

Buffon describes fifteen species and varieties of the Curlew, and Latham ten, only two or three of which are British birds. They feed upon worms, which they pick up on the surface, or with their bills dig from the soft earth: on these they depend for their principal support; but they also devour the various kinds of insects which swarm in the mud; and in the wet boggy grounds, where these birds chiefly take up their abode.



THE CURLEW.

(*Scolopax arquata*, Lin.—*Le Courlis*, Buff.)

The Curlew generally measures about two feet in length, and from tip to tip above three feet. The bill is about seven inches long, of a regular curve, and tender substance at the point, which is blunt. The upper mandible is black, gradually softening into brown towards the base; the under one flesh-coloured. The head and neck are streaked with darkish and light brown; the wing coverts are of the same colours; the feathers of the back and scapulars are nearly black in the middle, edged and deeply indented with pale rust colour, or light grey. The breast, belly, and the lower part of the back are dull white, the latter thinly spotted with black, and the two former with oblong strokes more thickly set, of the same

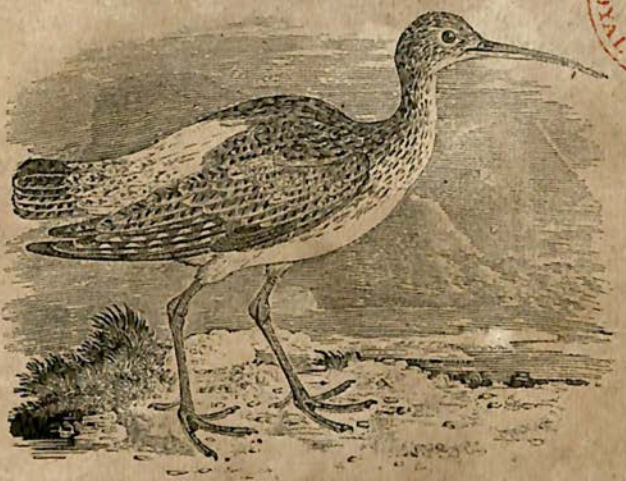
colour. The quill feathers are black, the inner webs crossed or spotted with white: the tail is barred with black, on a white ground tinged with red: the thighs are bare about half way above the knees, of a bluish colour, and the toes are thick, and flat on the under side, being furnished with membraneous edgings on each side to the claws.

These birds differ much in size, as well as in the different shades of their plumage, some of them weighing not more than twenty-two ounces, and others as much as thirty-seven. In the plumage of some the white parts are much more distinct and clear than in others, which are more uniformly grey, and tinged with pale brown.

The female is so nearly like the male, that any particular description of her is unnecessary: she makes her nest upon the ground, in a dry tuft of rushes or grass, of such withered materials as are found near, and lays four eggs of a greenish cast, spotted with brown.

The Curlew is met with by travellers in most parts of Europe, from Iceland to the Mediterranean Islands. In Britain their summer residence is upon the large, heathy, boggy moors, where they breed. Their food consists of worms, flies, and insects, which they pick out of the soft mossy ground by the marshy pools, which are common in such places. In winter they depart to the sea-side, where they are seen in great numbers, and then live upon the worms, marine insects, and other fishy substances which they pick up on the beach, and among the loose rocks and pools left by the retiring tide. The flesh of the Curlew has been characterised by some as very good, and of a fine flavour; by others as directly the reverse: the truth is, that while they are in health and season, and

live on the moors, scarcely any bird can excel them in goodness; but when they have lived some time on the sea-shore, they acquire a rank and fishy taste.



THE WHIMBREL.

(*Scolopax Phœopus*, Lin.—*Le petit Courlis*, Buff.)

THE Whimbrel is only about half the size of the Curlew, which it very nearly resembles in shape, the colours of its plumage, and manner of living. It is about seventeen inches in length, and twenty-nine in breadth, and weighs about fourteen ounces. The bill is about three inches long, the upper mandible black, the under one pale red. The upper part of the head is black, divided in the middle of the crown by a white line from the brow to the hinder part: between the bill and the eyes there is a darkish oblong spot: the sides of the head, the neck, and breast, are of a pale brown, marked with narrow

dark streaks pointing downwards: the belly is of the same colour, but the dark streaks upon it are larger; about the vent it is quite white; the lower part of the back is also white. The rump and tail feathers are barred with black and white; the shafts of the quills are white, the outer webs totally black, but the inner ones marked with large white spots: the secondary quills are spotted in the same manner on both the inner and outer webs. The legs and feet are of the same shape and colour as those of the Curlew.

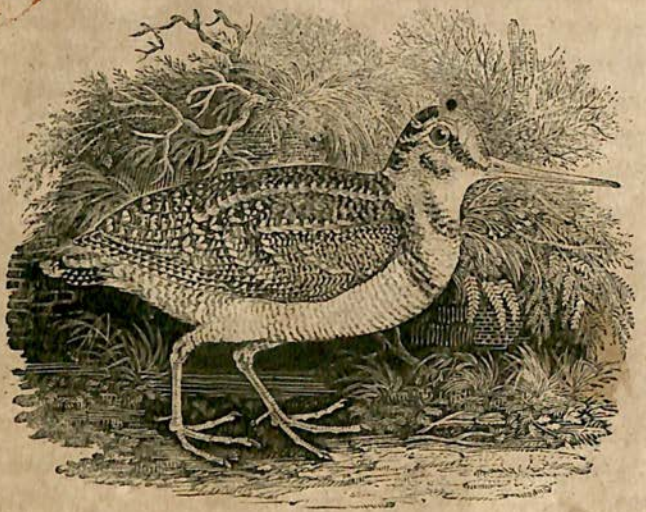
The Whimbrel is not so commonly seen on the sea-shores of this country as the Curlew; it is also more retired and wild, ascending to the highest mountain heaths in spring and summer to feed and rear its young.

OF THE SNIPE.

THE bill is long, straight, narrow, flexible, and rather blunt at the tip; the nostrils are linear, and lodged in a furrow; the tongue is pointed and slender; the toes divided, or very slightly connected, and the back toe very small.

This division of the numerous *Scolopax* genus of Linnæus amounts, according to Latham, to about twenty species, besides varieties, of which only the Woodcock, Common Snipe, and Judcock, and their varieties, are accounted British Birds.

Pennant has placed the Woodcock after the Curlews as the head of the Godwits and Snipes; and others are of opinion that the Knot, from the similarity of its figure to that of the Woodcock, ought to be classed in this tribe. In these subdivisions ornithologists may vary their classifications without end. As in a chain doubly suspended, the rings of which gradually diminish towards the middle, the leading features of some particular bird may point it out as a head to a tribe; others from similarity of shape, plumage, or habits, will form, by almost imperceptible variations, the connecting links; and those which may be said to compose the curvature of the bottom, by gradations equally minute, will rise to the last ring of the other end, which, as the head of another tribe, will be marked with characters very different from the first.



THE WOODCOCK.

(*Scolopax Rusticola*, Lin.—*La Becasse*, Buff.)

The Woodcock measures fourteen inches in length, and twenty-six in breadth, and generally weighs about twelve ounces. The shape of the head is remarkable, being rather obtusely triangular than round, with the eyes placed near the top, and the ears very forward, nearly on a line with the corners of the mouth. The upper mandible, which measures about three inches, is furrowed nearly its whole length, and at the tip it projects beyond and hangs over the under one, ending in a kind of knob, which, like those of others of the same genus, is susceptible of the finest feeling, and calculated by that means, aided, perhaps, by an acute smell, to find the small worms in the soft moist grounds, from whence it extracts them with its sharp-pointed tongue. With the bill it also turns over

and tosses the fallen leaves in search of the insects which shelter underneath. The crown of the head is of an ash colour; the nape and back part of its neck black, marked with three bars of rusty red: a black line extends from the corners of the mouth to the eyes, the orbits of which are pale buff; the whole under parts are yellowish white, numerously barred with dark waved lines. The tail consists of twelve feathers, which, like the quills, are black, and indented across with reddish spots on the edges: the tip is ash coloured above, and of a glossy white below. The legs are short, feathered to the knees, and, in some, are of a bluish cast, in others, of a sallow flesh colour. The upper parts of the plumage are so marbled, spotted, barred, streaked, and variegated, that to describe them with accuracy would be difficult and tedious. The colours, consisting of black, white, grey, ash, red, brown, rufous, and yellow, are so disposed in rows, crossed and broken at intervals by lines and marks of different shapes, that the whole seems to the eye, at a little distance, blended together and confused, which makes the bird appear exactly like the withered stalks and leaves of ferns, sticks, moss, and grasses, which form the back ground of the scenery by which it is sheltered in its moist and solitary retreats. The sportsman only, by being accustomed to it, is enabled to discover it, and his leading marks are its full dark eye, and glossy silver-white tipped tail. In plumage the female differs very little from the male, and like most other female birds, only by being less brilliant in her colours.

The flesh of the Woodcock is held in very high estimation, and hence it is eagerly sought after by the sportsman. It is hardly necessary to notice, that in cooking

it, the entrails are not drawn, but roasted within the bird, whence they drop out with the gravy upon slices of toasted bread, and are relished as a delicious kind of sauce.

The Woodcock is migratory, and in different seasons is said to inhabit every climate: it leaves the countries bordering upon the Baltic in the autumn and setting in of winter, on its route to this country. They do not come in large flocks, but keep dropping in upon our shores singly, or sometimes in pairs, from the beginning of October till December. They must have the instinctive precaution of landing only in the night, or in dark misty weather, for they are never seen to arrive; but are frequently discovered the next morning in any ditch which affords shelter, and particularly after the extraordinary fatigue occasioned by the adverse gales which they often have to encounter in their aerial voyage. They do not remain near the shores to take their rest longer than a day, but commonly find themselves sufficiently recruited in that time to proceed inland, to the very same haunts which they left the preceding season.* In temperate weather they retire to the mossy moors, and high bleak mountainous parts of the country; but as soon as the frost sets in, and the snows begin to fall, they return to lower and warmer situations, where they meet with boggy

* In the winter of 1797, the gamekeeper of E. M. Pleydell, Esq. of Whatcombe, in Dorsetshire, brought him a Woodcock, which he had caught in a net set for rabbits, alive and unhurt. Mr P. scratched the date upon a bit of thin brass, and bent it round the Woodcock's leg, and let it fly. In December the next year, Mr Pleydell shot this bird with the brass about its leg, in the very same wood where it had been first caught by the gamekeeper.

(Communicated by Sir John Trevelyan, Bart.)

grounds and springs, and little oozing mossy rills which are rarely frozen, and seek the shelter of close bushes of holly, furze, and brakes in the woody glens, or hollow dells which are covered with underwood: there they remain concealed during the day, and remove to different haunts and feed only in the night. From the beginning of March to the end of that month, or sometimes to the middle of April, they all keep drawing towards the coasts, and avail themselves of the first fair wind to return to their native woods: should it happen to continue long to blow adversely, they are thereby detained; and as their numbers increase, they are more easily found and destroyed by the merciless sportsman.

The female makes her nest on the ground, generally at the root or stump of a decayed tree; it is carelessly formed of a few dried fibres and leaves, upon which she lays four or five eggs, larger than those of a Pigeon, of a rusty grey colour, blotched and marked with dusky spots. The young leave the nest as soon as they are freed from the shell, but the parent birds continue to attend and assist them until they can provide for themselves. Buffon says they sometimes take a weak one under their throat, and convey it more than a thousand paces.

Latham mentions three varieties of British Woodcocks: in the first, the head is of a pale red, body white, and the wings brown; the second is of a dun, or rather cream colour; and the third of a pure white.* Dr

* A white Woodcock was seen three successive winters in Penrice wood, near Penrice Castle, in Glamorganshire: it was repeatedly flushed and shot at during that time, in the very same place where it was first discovered: at last it was found dead, with several others which had perished by the severity of the weather, in the winter of 1753. This account, which was communicated to the author by Sir John Trevelyan,

Heysham, in his Catalogue of Cumberland Animals, mentions his having met with one, the general colour of which was a fine pale ash, with frequent bars of a very delicate rufous: tail brown, tipped with white; and the bill and legs flesh colour. In addition to these, some other varieties are taken notice of by the late Marmaduke Tunstall, Esq. of Wycliffe, in his interleaved books of ornithology.

Latham and Pennant assert, that some Woodcocks deviate from the course which Nature seems to have taught their species, by remaining throughout the year, and breeding in this country; and this assertion Mr Tunstall corroborates by such a number of well-authenticated instances, that the fact is unquestionable.

When the Woodcock is pursued by the sportsman, its flight is very rapid, but short, as it drops beind the first suitable sheltering coppice, with great suddenness, and in order to elude discovery, runs swiftly off, in quest of some place where it may hide itself in greater security.

To describe the various methods which are practised by fowlers to catch this bird, would be tedious; but it may not be improper to notice those most commonly in use, and against which it does not seem to be equally on its guard as against the gun. It is easily caught in the nets, traps, and springes which are placed in its accustomed runs or paths, as its suspicions are all lulled into security by the silence of the night; and it will not fly or leap over any obstacles which are placed in its way, while it is in quest of its food; therefore, in those places,

Bart. on the authority of the Rev. Dr Hunt, proves not only the existence of white Woodcocks, but also the truth of the assertion, that the haunts of this bird are the same year after year.

barriers and avenues formed of sticks, stones, &c. are constructed so as to *weir* it into the fatal openings, where it is entrapped: in like manner, a low fence made of the tops of broom stuck into the ground, across the wet furrow of a field, or a runner from a spring which is not frozen, is sufficient to stay its progress, and to make it seek from side to side for an opening through which it might pass; and there it seldom escapes the noose that is set to secure it.

At the root of the first quill in each wing is a small pointed narrow feather, very elastic, and much sought after by painters, by whom it is used as a pencil. A feather of a similar kind is found in the whole of this tribe, and also in every one of the Tringas and Plovers which the author has examined. The annexed figure represents a scapular feather of the Woodcock.

THE GREAT SNIPE.

(Scolopax Media.)

LATHAM gives the following description of this bird: "Size between the Woodcock and Snipe: weight eight ounces: length sixteen inches: bill four inches long, and like that of the Woodcock: crown of the head black,

divided down the middle by a pale stripe: over and beneath each eye another of the same: the upper parts of the body very like the Common Snipe: beneath white: the feathers edged with dusky black on the neck, breast, and sides; and those of the belly spotted with the same, but the middle of it is plain white: quills dusky: tail reddish, the two middle feathers plain, the others barred with black: legs black." He adds, "This is a rare species. A fine specimen of it was shot in Lancashire, now in the Leverian museum; said also to have been met with in Kent."*

* The author has seen three specimens of a large kind of Snipe, called, by some sportsmen, from being always found alone, the *Solitary Snipe*. They weighed the same as the above-mentioned, but differed in some slight particulars, measuring only twelve inches in length, and from tip to tip about nineteen. The upper parts of the plumage were nearly like those of the Common Snipe: the breast, sides, belly, and vent white, spotted, barred, and undulated with black. It is not clearly ascertained whether this be a distinct species of Snipe, or whether it acquires its bulk and change of plumage from age, and its solitary habits from ceasing to breed.

THE COMMON SNIPE.

SNITE, OR HEATHER-BLEATER.

(Scolopax Gallinago, Lin.—*La Becassine*, Buff.*)*

THE Common Snipe is generally about four ounces in weight, and measures twelve inches in length, and fourteen in breadth. The bill is nearly three inches long; in some pale brown, in others greenish yellow, rather flat and dark at the tip, and very smooth in the living bird; but it soon becomes dimpled like the end of a thimble, after the bird is dead: the head is divided lengthwise by three reddish or rusty white lines, and two of black; one of the former passes along the middle of the crown, and one above each eye: a darkish mark is extended from the corners of the mouth nearly to each eye, and the auriculars form spots of the same colour: the chin and fore part of the neck are yellowish white, the former plain, the latter spotted with brown. The scapulars are elegantly striped lengthwise on one web, and barred on the

other, with black and yellow: the quills are dusky, the edge of the primaries, and tips of the secondaries, white; those next to the back barred with black, and pale rufous: the breast and belly are white: the tail coverts are of a reddish brown, and so long as to cover the greater part of it: the tail consists of fourteen feathers, the webs of which, as far as they are concealed by the coverts, are dusky, thence downward, tawny or rusty orange, and irregularly marked or crossed with black. The tip is commonly of a pale reddish yellow, but in some specimens nearly white: the legs are pale green.*

The common residence of the Snipe is in small bogs or wet grounds, where it is almost constantly digging and nibbling in the soft mud, in search of its food, which consists chiefly of a very small kind of red transparent worm, about half an inch long; it is said also to eat slugs, and the insects and grubs of various kinds, which breed in great abundance in those slimy stagnant places. In these retreats, when undisturbed, the Snipe walks leisurely, with its head erect, and at short intervals keeps moving the tail. But in this state of tranquillity it is very rarely to be seen, as it is extremely watchful, and perceives the sportsman or his dog at a great distance, and instantly conceals itself among the variegated withered herbage, so similar in appearance to its own plumage, that it is almost impossible to discover it while squatted motionless in its seat: it seldom, however, waits the near

* Mr Tunstall mentions a "very curious pied Snipe which was shot in Bottley meadow, near Oxford, September 8, 1789, by a Mr Court: its throat, breast, back and wings, were beautifully covered or streaked with white, and on its forehead was a star of the natural colour; it had also a ring round the neck and the tail, with the tips of the wings of the same colour."

approach of any person, particularly in open weather, but commonly springs, and takes flight at a distance beyond the reach of the gun. When first disturbed, it utters a kind of feeble whistle, and generally flies against the wind, turning nimbly in a zigzag direction for two or three hundred paces, and sometimes soaring almost out of sight; its note is then something like the bleating of a goat, but this is changed to a singular humming or drumming noise, uttered in its descent.

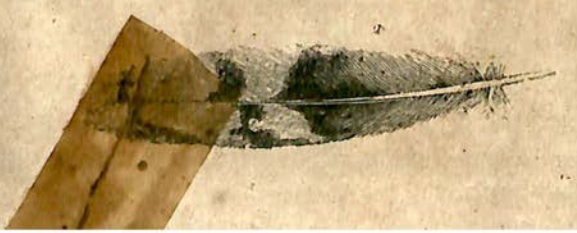
From its vigilance and manner of flying, it is one of the most difficult birds to shoot. Some sportsmen can imitate their cries, and by that means draw them within reach of their shot; others, of a less honourable description, prefer the more certain and less laborious method of catching them in the night by a springe like that which is used for the Woodcock.

The Snipe is migratory, and is met with in all countries: like the Woodcock, it shuns the extremes of heat and cold, by keeping upon the bleak moors in summer, and seeking the shelter of the vallies in winter. In severe frosts and storms of snow, driven by the extremity of the weather, they seek the unfrozen boggy places, runners from springs, or any open streamlet of water, and they are sure to be found, often in considerable numbers, in these places, where they sometimes sit till nearly trodden upon before they will take their flight.

Although it is well known that numbers of Snipes leave Great Britain in the spring, and return in the autumn, yet it is equally well ascertained that many constantly remain and breed in various parts of the country, for their nests and young ones have been so often found as to leave no doubt of this fact. The female makes her nest in the

most retired and inaccessible part of the morass, generally under the stump of an alder or willow: it is composed of withered grasses and a few feathers: her eggs, four or five in number, are of an oblong shape, and of a greenish colour, with rusty spots. The young ones run off soon after they are freed from the shell, but they are attended by the parent birds until their bills have acquired a sufficient firmness to enable them to provide for themselves.

The Snipe is a very fat bird, but its fat does not cloy, and very rarely disagrees even with the weakest stomach. It is much esteemed as a delicious and well-flavoured dish, and is cooked in the same manner as the Woodcock.



THE JUDCOCK.

JACK SNIPE, GID, OR JETCOCK.

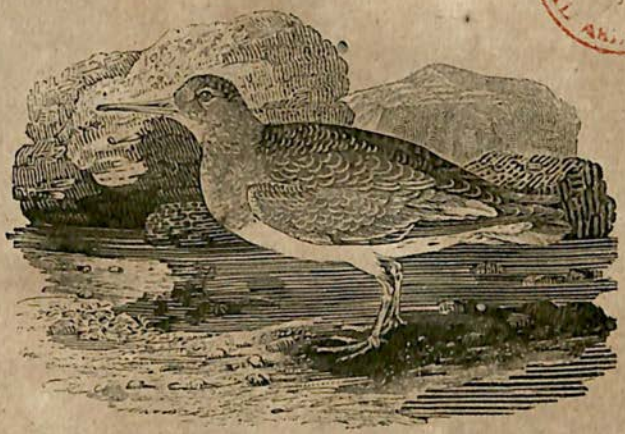
(*Scolopax Gallinula*, Lin.—*La petite Becassine*, Buff.)

THE Judcock, in its figure and plumage, nearly resembles the Common Snipe; but it is only about half its weight, seldom exceeding two ounces, or measuring more, from the tip of its beak to the end of its tail, than eight inches and a half. The bill is black at the tip, and light towards the base, and rather more than an inch and a half in length. A black streak divides the head lengthwise from the base of the bill to the nape of the neck; and another, of a yellowish colour, passes over each eye to the hinder part of the head: in the midst of this, above the eye, is a narrow black stripe running parallel with the top of the head from the crown to the nape. The neck is white, spotted with brown and pale red. The scapulars and tertials are very long and beautiful; on their exterior edges they are bordered with a stripe of

yellow, and the inner webs are streaked and marked with bright rust colour on a deep brown, or rather bronze, ground, reflecting in different lights a shining purple or green. The quills are dusky. The rump is of a glossy violet or bluish purple; the belly and vent white. The tail consists of twelve pointed feathers of a dark brown, edged with rust colour: the legs are of a dirty or dull green.

The Judcock is of nearly the same character as the Snipe; it feeds upon the same kinds of food, lives and breeds in the same swamps and marshes, and conceals itself from the sportsman with as great circumspection, among the rushes or tufts of coarse grass. It, however, differs in this particular, that it seldom rises from its lurking place until it is almost trampled upon, and, when flushed, does not fly to so great a distance. It is as much esteemed as the Snipe, and is cooked in the same manner.

The eggs are not bigger than those of a Lark; in other respects they are very like those of the Snipe.



THE KNOT,

KNUTE, OR KNOUT.

(*Tringa Canutus*, Lin.—*Le Canut*, Buff.)

THESE birds, like others of the same genus, differ considerably from each other in their appearance, in different seasons of the year, as well as from age and sex. The specimen from which the above drawing was taken, measured from the point of the bill to the tip of the tail, eight inches and a half, the extended wings about fifteen, and it weighed two ounces eight drachms: the bill was one inch and three-eighths long, black at the tip, and dusky, fading into orange towards the base; tongue of nearly the same length, sharp and horny at the point; sides of the head, neck, and breast, cinereous, edged with ash-coloured grey; the chin white, and a stroke of the same colour passed over each eye. All the upper parts of the plumage were darkish brown, but more deep and glossy on the crown of the head, back and scapulars, and

each feather was edged with ash or grey: the under parts were a cream coloured white, streaked or spotted with brown on the sides and vent; the greater coverts of the wings tipped with white, which formed a bar across them when extended: the legs reddish yellow, and short, not measuring more than two inches and one-eighth from the middle toe nail to the knee; the thighs feathered very nearly to the knees; toes divided without any connecting membrane.

This bird is caught in Lincolnshire and the other fenny counties, in great numbers,* by nets, into which it is decoyed by carved wooden figures, painted to represent itself, and placed within them, much in the same way as the Ruff. It is also fattened for sale, and esteemed by many equal to the Ruff in the delicacy of its flavour. The season for taking it is from August to November, after which the frost compels it to disappear.

This bird is said to have been a favourite dish with Canute, king of England; and Camden observes, that its name is derived from his—Knute, or Knout, as he was called, which, in process of time, has been changed to Knot.

* Pennant says fourteen dozen have been taken at once.

OF THE GODWIT.

Buffon enumerates eight species of this division of the *Scolopax* genus, under the name of Barges, including the foreign kinds; and Latham makes out the same number of different sorts, all British. They are a timid, shy, and solitary tribe; their mode of subsistence constrains them to spend their lives amidst the fens, searching for their food in the mud and wet soil, where they remain during the day, shaded and hidden among reeds and rushes, in that obscurity which their timidity makes them prefer. They seldom remain above a day or two in the same place; and it often happens that in the morning not one is to be found in those marshes where they were numerous the evening before. They remove in a flock in the night, and when there is moonlight, may be seen and heard passing at a vast height. Their bills are long and slender, and, like the Common Snipe's, are smooth and blunt at the tip: their legs are of various colours, and long. When pursued by the sportsman, they run with great speed, are very restless, spring at a great distance, and make a scream as they rise. Their voice is somewhat extraordinary, and has been compared to the smothered bleating of a goat. They delight in salt marshes, and are rare in countries remote from the sea. Their flesh is delicate and excellent food.

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THE GODWIT.

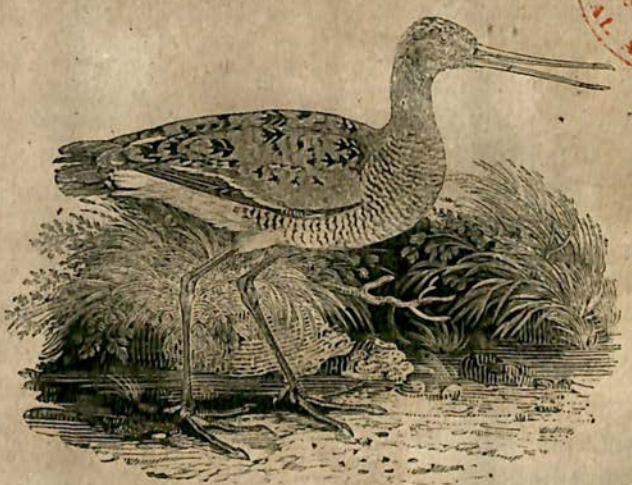
COMMON GODWIT, GODWYN, YARWHELP, OR YARWIP.

(*Scolopax ægocephala*, Lin.—*La grande Barge grise*, Buff.)

THE weight of this bird is about twelve ounces; length about sixteen inches. The bill is four inches long, and bent a little upwards, black at the point, gradually softening into a pale purple towards the base; a whitish streak passes from the bill over each eye: the head, neck, back, scapulars, and coverts, are of a dingy reddish pale brown, each feather marked down the middle with a dark spot. The fore part of the breast is streaked with black; the belly, vent, and tail are white, the latter regularly barred with black: the webs of the first six quill feathers are black, edged on the interior sides with reddish brown: the legs are in general dark coloured, inclining to a greenish blue.

The Godwit is met with in various parts of Europe, Asia, and America: in Great Britain, in the spring and summer, it resides in the fens and marshes, where it rears its young, and feeds upon small worms and insects. During these seasons it removes only from one marsh to another; but when the winter sets in with severity, it seeks the salt marshes and the sea-shores.

The Godwit is much esteemed, by epicures, as a great delicacy, and sells very high. It is caught in nets, to which it is allured by a *stale*, or stuffed bird, in the same manner, and in the same season, as the Ruffs and Reeves.



THE RED GODWIT,

OR, RED-BREASTED GODWIT.

(*Scolopax Lapponica*, Lin.—*La Barge Rousse*, Buff.)

This bird exceeds the Common Godwit in size, and is distinguished from it by the redness of its plumage;

in other respects its general appearance and manner of living are nearly the same. It measures eighteen inches in length, and weighs about twelve ounces. The bill is nearly four inches long, slightly turned upwards, dark at the tip, and of a dull yellowish red towards the base. The predominant colour of the head, upper part of the shoulders, breast and sides, is a bright ferruginous or rusty red, streaked on the head with brown, and on the breast and sides barred or marbled with dusky, cinereous, and white; the neck plain dull rusty red. The back, scapulars, greater and lessser coverts, are ash coloured brown; on the former two, some of the feathers are barred and streaked with black and rust colour, and edged with pale reddish white. The rump is white; the middle of the belly, and the vent, the same, slightly spotted with brown: a bar of white is formed across each wing by the tips of the greater coverts. The exterior webs, and tips of the primary quills, are of a dark brown colour, and the interior webs are white towards their base. In some specimens the tail is barred with black, or dark brown, upon a pale rufous ground; in others it is plain dark brown, with light tips and edges. The legs are dusky, and bare a long space above the knees.

Mr Pennant, in his Arctic Zoology, says, "these birds are found in the north of Europe, and about the Caspian Sea, but never in Siberia, or any part of Northern Asia." According to Latham, they are plentiful in the fens about Hudson's Bay, in America. They are not very common in Great Britain. It is praised by those who have eaten it, as a very well-tasted and delicious bird.

There is reason to suppose that Buffon has described the male and female Red Godwits as two distinct species.

In his *Planches Enluminves*, the *Barge Rousse* is the female, and the *Grande Barge Rousse*, the male, Red Godwit. The colours are the same in both, but the feathers of the female are not so variegated, clouded and barred, being of a more uniform rufous, or rust colour, on the head, neck, breast, and belly, and on the upper parts of a more plain brown. His descriptions agree with the foregoing, except that the tail of his *Grande Barge Rousse* is plain brown, and that of the specimen from which the above drawing was made, is barred with rust colour.

The foregoing figure and description were taken from a bird in full plumage, sent to the author by the Rev. J. Davies, senior fellow of Trinity College, Cambridge, to whom he is indebted for most of the fen birds.

THE CINEREOUS GODWIT.

This species, as well as several others of the same genus, seems to be very imperfectly known, or ascertained: the slight shades of difference in their size and plumage, probably occasioned only by age or sex, there is cause to suspect may have led nomenclators, in their over anxiety to add new species to their numbers, into errors; but, however this may be, the author will leave the matter as it stands at present, to be elucidated by sportsmen and ornithologists; and as he has never seen this or the two following kinds, he presents only the descriptions of others. Latham says it is the "size of the Greenshank. Bill two inches and a half long, but thicker than in that bird: the head, neck, and back variegated with ash colour and white: tail slightly barred with cinereous: throat and breast white; the last marked with a few ash-coloured

spots: legs long, slender, and ash-coloured." He mentions one as having been shot near Spalding, in Lincolnshire. Pennant says, "it is about the size of the Greenshank, which it nearly resembles in its colours, but the bill is so much thicker, as to form a specific distinction."

THE CAMBRIDGE GODWIT.

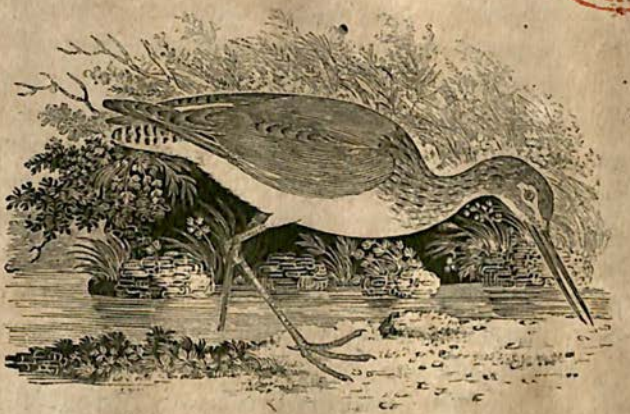
"LARGER than the Common Redshank. Head, upper part of the neck, and back, cinereous brown: lesser wing coverts brown, edged with dull white, and barred with black: primaries dusky, whitish on their inner sides: secondaries barred, dusky and white: underside of the neck and breast, dirty white: belly and vent, white: tail barred, cinereous and black: legs orange: shot near Cambridge." *Latham.*

THE LESSER GODWIT.

SECOND SORT OF GODWIT, OR JADREKA SNIPE.

(*Scolopax limosa*, Lin.—*La Barge*, Buff.)

"LENGTH seventeen inches: weight nine ounces. Bill near four inches long, dusky, the base yellowish: irides white: the head and neck are cinereous: cheeks and chin white: back, brown: on the wings, a line of white: vent and rump, white: two middle tail feathers, black; the others, white at the ends, which increases on the outer feathers, so as the exterior ones are white for nearly the whole length: legs, dusky. This inhabits Iceland, Greenland, and Sweden. Migrates in flocks in the south of Russia. Seen about Lake Baikal: and is said also to have been met with in England." *Latham.*



THE GREENSHANK.

GREEN-SHANKED GODWIT, OR GREEN-LEGGED HORSEMAN.

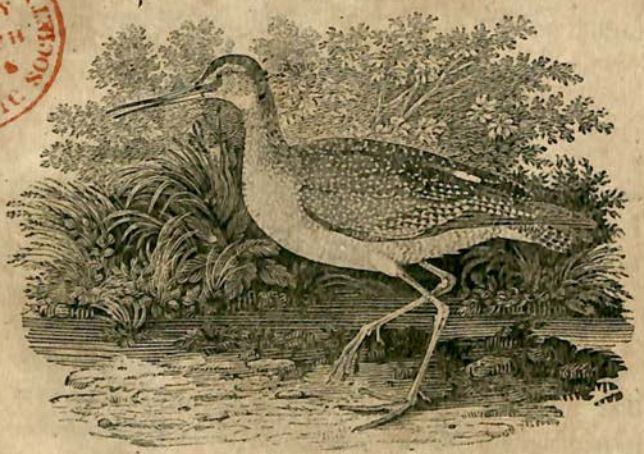
(*Scolopax glottis*, Lin.—*La Barge variée*, Buff.)

THE Greenshank is of a slender and elegant shape, and its weight small in proportion to its length and dimensions, being only about six ounces, although it measures from the tip of its beak to the end of its tail fourteen inches, and to the toes twenty; and from tip to tip of the wings, twenty-five. The bill is about two inches and a half long, straight and slender, the upper mandible black, the under reddish at its base. The upper parts of its plumage are pale brownish ash colour, but each feather is marked down the shaft with a glossy bronze brown: the under parts, and rump, are of a pure white: a whitish streak passes over each eye: the quill feathers are dusky, plain on the outer webs, but the inner ones are speckled with white spots: the tail is white, crossed with dark

waved bars: the legs are long, bare about two inches above the knees, and of a dark green colour: the outer toe is connected by a membrane to the middle one as far as the first joint.

This species is not numerous in England, but they appear in small flocks, in the winter season, on the sea-shores and the adjacent marshes; their summer residence is in the northern regions of Russia, Siberia, &c. where they are said to be in great plenty; they are also met with in various parts of both Asia and America. Their flesh, like all the rest of this genus, is well-flavoured, and esteemed good eating.

The above figure and description were taken from a stuffed specimen in the Wycliffe museum.



THE SPOTTED REDSHANK.

RED-LEGGED GODWIT, SPOTTED SNIPE, OR BARKER.

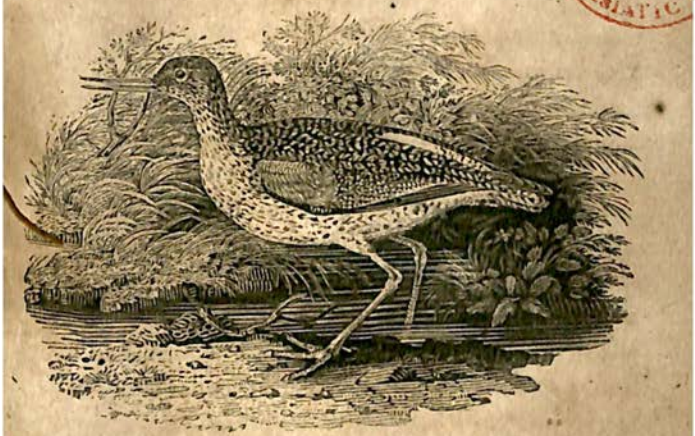
(*Scolopax Totanus*, Lin.—*Le Chevalier rouge*, Buff.)

THE length of this bird, from the tip of the bill to the

end of the tail, is twelve inches, and to the end of the toes fourteen inches and a half; its breadth twenty-one inches and a quarter, and its weight about five ounces two drachms, avoirdupoise. The bill is slender, measures two inches and a half from the corners of the mouth to the tip, and is, for half its length, nearest the base, red; the other part black: irides hazel: the head, neck, breast, and belly are spotted in streaks, mottled and barred with dingy ash brown and dull white, darker on the crown and hinder part of the neck: the throat is white, and lines of the same colour pass from the upper sides of the beak over each eye, from the corners of which two brown ones are extended to the nostrils: the ground colour of the shoulders, scapulars, lesser coverts, and tail, is a glossy olive brown,—the feathers on all these parts are indented on the edges, more or less, with triangular-shaped white spots. The back is white; the rump barred with waved lines of ash coloured brown, and dingy white: the vent feathers are marked nearly in the same manner, but with a greater portion of white: the tail and coverts are also barred with narrow waved lines, of a dull ash colour, and, in some specimens, are nearly black and white. Five of the primary quills are dark brown, tinged with olive; the shaft of the first quill is white; the next six are, in the male, rather deeply tipped with white, and slightly spotted and barred with brown: the secondaries, as far as they are uncovered, when the wings are extended, are of the same snowy whiteness as the back. The feathers which cover the upper part of the thighs, and those near them, are blushed with a reddish or vinous colour: the legs are of a deep orange red, and measure,

from the end of the middle toe nail to the upper bare part of the thigh, five inches and a half.

A stuffed specimen of this elegant-looking bird, from which the figure and description were taken, was the gift of Mr Riddiough, of Ormskirk: another of these birds, in perfect plumage, was shot by Mr John Bell, of Alemouth, merchant, in September, 1801; it differed from the former in being more sparingly spotted with white on the upper parts, and in its breast, belly, and the inside of the wings, being of a snowy whiteness, and its sides, under the wings, more delicately spotted with pale brown.



THE REDSHANK.

RED-LEGGED HORSEMAN, POOL SNIPE, OR SAND COCK.

(*Scolopax Calidris*, Lin.—*Le Chevalier aux Pieds Rouges*, Buff.)

THIS bird weighs about five ounces and a half: its length is twelve inches, and the breadth twenty-one. The bill, from the tip to the corners of the mouth, is more than an inch and three-quarters long, black at the point, and red towards the base: the feathers on the crown of the head are dark brown, edged with pale rufous; a light or whitish line passes over, and surrounds each eye, from the corners of which a dark brown spot is extended to the beak: irides hazel: the hinder part of the neck is obscurely spotted with dark brown, on a rusty ash coloured ground; the throat and fore part are more distinctly marked or streaked with spots of the same colour: on the breast and belly, which are white, tinged with ash, the spots are thinly distributed, and are shaped

something like the heads of arrows or darts. The general appearance of the upper parts of the plumage is glossy olive brown; some of the feathers are quite plain, others spotted on the edges with dark brown, and those on the shoulders, scapulars, and tertials are transversely marked with the same coloured waved bars, on a pale rusty ground: the bastard wing and primary quills are dark brown; the inner webs of the latter are deeply edged with white, freckled with brown, and some of those quills next the secondaries are elegantly marked, near their tips, with narrow brown lines, pointed and shaped to the form of each feather; some of the secondaries are barred in nearly the same manner, others are white: back white; the tail feathers and coverts are beautifully marked with alternate bars of dusky and white, the middle ones slightly tinged with rust colour: legs red, and measure from the end of the toes to the upper bare part of the thigh, four inches and a half.

This species is of a solitary character, being mostly seen alone, or in pairs only. It resides the greater part of the year in the fen countries, in the wet and marshy grounds, where it breeds and rears its young. It lays four eggs, whitish, tinged with olive, and marked with irregular spots of black, chiefly on the thicker end. Pennant and Latham say, "it flies round its nest, when disturbed, making a noise like a Lapwing." It is not so common on the sea-shores as several others of its kindred species.

Ornithologists differ much in their descriptions of the Redshank, and probably have confounded it with others of the red-legged tribe, whose proper names are yet wanting, or involved in doubt and uncertainty. Latham, in his supplement, describes this bird as differing so much

in its summer and winter dress, and in its weight, as to appear to be of two distinct species. There is reason to believe that several species of the *Scolopax* and *Tringa* genera, which have not yet been taken into the list of British birds, appear occasionally in Great Britain, and that this circumstance, together with the difference of age and sex, has occasioned much confusion. The figure and description of this pretty bird were taken from a specimen sent by the Rev. J. Davies, of Trinity College, Cambridge: on comparing it with that figured in the *Planches Enluminees*, under the title of *Le Chevalier rayé*, and the striated Sandpiper of Pennant and Latham, the difference was so slight, that there is no doubt of its being the same species.

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OF THE SANDPIPER.

THE tongue is slender; toes divided, or very slightly connected at the base by a membrane; hinder toe weak: their bills are nearly of the same form as those of the preceding species, but shorter: their haunts and manner of life are also very similar. Latham has enumerated thirty-seven species and nine varieties of this genus, seventeen of which are British, exclusive of those which in this work are placed among the Plovers; but the history and classification of this genus are involved in much uncertainty.

THE RUFF.

(*Tringa Pugnax*, Lin.—*Le Combattant*, Buff.)

THE male of this curious species is called the Ruff, and the female the Reeve: they differ materially in their

exterior appearance; and also what is remarkable in wild birds, it very rarely happens that two Ruffs are alike in the colours of their plumage.* The singular, wide-spreading, variegated tuft of feathers which, in the breeding season, grows out of their necks, is different in all. This tuft or ruff, a portion of which stands up like ears behind each eye, is in some black, in others black and yellow, and in others again white, rust colour, or barred with glossy violet, black and white. They are, however, more nearly alike in other respects: they measure about a foot in length, and two in breadth, and when first taken, weigh about seven ounces and a half; the female seldom exceeds four. The bill is more than an inch long, black at the tip, and reddish yellow towards the base; the irides are hazel: the whole face is covered with reddish tubercles, or pimples; the wing coverts are brownish ash colour: the upper parts and the breast are generally marked with transverse bars, and the scapulars with roundish-shaped glossy black spots, on a rusty-coloured ground: quills dusky: belly, vent, and tail coverts white: the tail is brown, the four middle feathers of it are barred with black: the legs are yellow. The male does not acquire the ornament of his neck till the second season, and, before that time, is not easily distinguished from the female, except by being larger. After moulting, at the end of June, he loses his ruff and the red tubercles on his face, and from that time until the spring of the year, he again, in plumage, looks like his mate.

These birds leave Great Britain in the winter, and are then supposed to associate with others of the *Tringa*

* Luffon says, that Klien compared above a hundred Ruffs together, and found only two that were similar.

genus, among which they are no longer recognized as the Ruff and Reeve. In the spring as soon as they arrive again in England, and take up their abode in the fens where they were bred, each of the males (of which there appears to be a much greater number than of females) immediately fixes upon a particular dry or grassy spot in the marsh, about which he runs round and round, until it is trodden bare: to this spot it appears he wishes to invite the female, and waits in expectation of her taking a joint possession, and becoming an inmate. As soon as a single female arrives, and is heard or observed by the males, her feeble cry seems as if it roused them all to war, for they instantly begin to fight, and their combats are described as being both desperate and of long continuance: at the end of the battle, she becomes the prize of the victor.* It is at the time of these battles that they are caught in the greatest numbers in the nets of the fowlers, who watch for that opportunity: they are also, at other times, caught by clap, or day nets,† and are drawn together by means of a stuffed Reeve, or what is called a *stale bird*, which is placed in some suitable spot for that purpose.

* Buffon says, "they not only contend with each other in single rencounter, but they advance to combat in marshaled ranks."

† These nets, which are about fourteen yards long, and four broad, are fixed by the fowler over night: at day-break in the morning he resorts to his stand, at a few hundred yards distance from the place, and at a fit opportunity pulls his cord, which causes his net to fall over and secure the prize. Mr Pennant says, an old fowler told him he once caught forty-four birds at one haul, and, in all, six dozen that morning: he also adds, that a fowler will take forty or fifty dozen in a season. The females are always set at liberty.

The Ruff is highly esteemed as a most delicious dish, and is sought after with great eagerness by the fowlers who live by catching them and other fen birds, for the markets of the metropolis, &c. Before they are offered for sale, they are commonly put up to feed for about a fortnight, and are during that time fed with boiled wheat, and bread and milk mixed with hempseed, to which sugar is sometimes added: by this mode of treatment they become very fat, and are often sold as high as two shillings and sixpence each.* They are cooked in the same manner as the Woodcock.

The female, in the beginning of May, makes her nest in a dry tuft of grass, in the fens, and lays four white eggs, marked with rusty spots.

These birds are common in the summer season in the fens of Denmark, Sweden, and Russia, and are also found in other more northern regions, even as far as Iceland.

THE SHORE SANDPIPER.

(*Tringa Littorea*, Lin.—*Le Chevalier varié*, Buff.)

Under this name Latham describes this bird, which, it is said, migrates from Sweden into England at the approach of winter. He makes it a variety of the last species, and says it does not differ materially from it. "The spots on the back are ferruginous instead of

* In a note communicated by the late George Allan, Esq. of the Grange, near Darlington, he says, "I dined at the George Inn, Coney-street, York, August 18, 1794, (the race week) where four Ruffs made one of the dishes at the table, which, in the bill, were separately charged sixteen shillings."

white: the shaft of the first quill is white, as in the Green Sandpiper; and the secondaries have white tips:* the legs are brown." Brunnich mentions a further variety, wherein the first quill has a black shaft, and the spots on the back and wings are less; and observes, that they differ in age and sex.†

THE GREEN SANDPIPER.

(*Tringa Ochropus*, Lin.—*Le Becasseau, ou Cul-blanc*, Buff.)

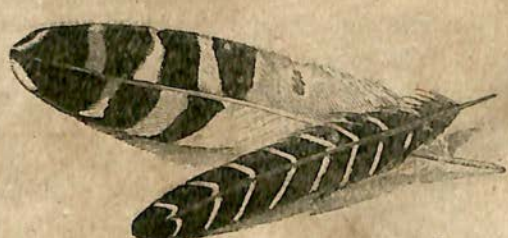
This bird measures about ten inches in length, to the end of the toes nearly twelve, and weighs about three ounces and a half. The bill is black, and an inch and a half long: a pale streak extends from it over each eye; between which and the corners of the mouth, there is a dusky patch. The crown of the head and hinder part of

* These are marks so common to many of this genus, that they cannot be considered as a feature sufficient to distinguish any particular species.

† Buffon's figure in the *Planches Enluminees* differs from this description.

the neck are of a dingy brownish ash colour, in some specimens narrowly streaked with white: the throat is white: fore part of the neck mottled or streaked with brown spots, on a white or pale ash coloured ground. The whole upper parts of the plumage are of a glossy bronze, or olive brown, elegantly marked on the edge of each feather with small roundish white spots: the quills are without spots, and are of a darker brown: the secondaries and tertials are very long: the insides of the wings are dusky, edged with white grey; and the inside coverts next the body are curiously barred, from the shaft of each feather to the edge, with narrow white lines, formed nearly of the shape of two sides of a triangle. The belly, vent, tail coverts, and tail, are white; the last broadly barred with black, the middle feathers having four bars, and those next to them decreasing in the number of bars towards the outside feathers, which are quite plain: the legs are green.

This bird is not any where numerous, and is of a solitary disposition, seldom more than a pair being seen together, and that chiefly in the breeding season. It is a scarce bird in England, but is said to be more common in the northern parts of the globe, even as far as Iceland. It is reported that they never frequent the sea-shores, but their places of abode are commonly on the margins of the lakes in the interior and mountainous parts of the country.



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THE GAMBET.

(Tringa gambetta, Lin.—*La Gambette*, Buff.*)*

This is the Chevalier Rouge of Brisson, and the Red-legged Horseman of Albin. For want of a specimen of this bird, the following description is borrowed from Latham:—

"Size of the Greenshank: length twelve inches. Bill of a reddish colour, with a black tip: the irides yellowish green: head, back, and breast cinereous brown, spotted with dull yellow: wing coverts and scapulars cinereous, edged with dull yellow: prime quills dusky; shaft of the first white: tail dusky, bordered with yellow: legs yellow.* This inhabits England, but is not common: has been shot on the coast of Lincolnshire. Known in France; but is there a rare bird. Has a note not unlike the whistle of a Woodcock; and the flesh is esteemed. Inhabits Scandinavia and Iceland; called in the last *Stelkr*. It has also been taken in the frozen sea between Asia and America."

THE ASH-COLOURED SANDPIPER.

Tringa Cinerea.

This bird weighs between four and five ounces, and measures ten inches in length, and about nineteen in breadth. The whole upper parts of the plumage are of a brownish ash colour: the head is spotted, and the neck streaked with dusky lines: the feathers of the back,

* The figure of this bird in the *Planches Enluminees* of Buffon, is red-legged, and also differs in plumage from this description.

scapulars, and wing coverts, are elegantly marked or bordered on their ridges and tips, with two narrow lines of dull white, and dark brown. Some specimens have black spots on the breast, but most commonly the whole under parts are pure white: the tail is cinereous, edged with white, and its coverts are barred with black: legs dirty green; toes edged with a fine narrow scallopped membrane.

The Ash-coloured Sandpiper, it is said, breeds in the northern parts of both Europe and America. Pennant says they appear in vast flocks on the shores of Flintshire in the winter season; and Latham, that they are seen in vast numbers on the Seal-Islands, near Chateaux Bay; and also that they breed and remain the whole summer at Hudson's Bay, where they are called by the natives *Sasqua pisqua nishish.*

THE COMMON SANDPIPER.

(*Tringa hypoleucos*, Lin.—*La Guignette*, Buff.)

This bird weighs about two ounces, and measures seven inches and a half in length. The bill is about an inch long, black at the tip, fading into pale brown towards the base. The head and hinder part of the neck are brownish ash, streaked downwards with dark narrow lines: the throat is white, and a streak of the same colour surrounds and is extended over each eye: the cheeks and auriculars are streaked with brown: the fore part of the neck to the breast is white, mottled and streaked with spots and lines of a brown colour, pointing downwards: in some the breast is plain white: belly and vent white. The ground colour of all the upper parts of the plumage is ash, blended with glossy olive bronze brown: the coverts, scapulars, lower part of the back and tail coverts, are edged with dull white, and most elegantly marked with transverse dark-coloured narrow waved

lines: the first two quills are plain brown; the next nine are marked on the middle of their inner webs, with white spots; the secondaries are also marked in the same manner, on both webs, and tipped with white? The tail consists of twelve feathers: the four middle ones are of an olive brown, dark at the tips; those next to them, on each side, are much lighter coloured, mottled with dark brown, and tipped with white; the two outside ones are edged and tipped in the same manner, but are barred on their webs with dark brown: legs pale dull green, faintly blushed with red.

This description was taken from a perfect bird, the present of the right honourable Lord Charles Aynsley, of Little-Harle Tower, Northumberland, in May, 1798. By comparing it with other birds, and other descriptions, (no doubt taken with equal accuracy) the truth of the observation so often made, that two birds even of the same species, are very seldom exactly alike, will be proved.

This elegant little bird breeds in this country, but the species is not numerous; yet they are frequently seen in pairs during the summer months; and are well known by their clear piping note, by their flight, by jerking up their tails, and by their manner of running after their insect prey on the pebbly margins of brooks and rivers. The female makes her nest in a hole on the ground near their haunts; her eggs, commonly five in number, are much mottled and marked with dark spots, on a yellowish ground. They leave England in the autumn, but whither they go is not particularly noticed by ornithologists. Buffon says they retire far north; and Pennant and Latham, that they are met with in Siberia and Kamtschatca, and are also not uncommon in North America.

THE BROWN SANDPIPER.

Fusca.

PENNANT describes this bird, which, he says, was bought in the London market, and preserved in the collection of the late M. Tunstall, Esq. of Wycliffe:—"Size of a Jacksnipe: the bill is black: the head, upper part of the neck, and back, are of a pale brown, spotted with black: coverts of the wings dusky, edged with dirty white: under side of the neck white, streaked with black: the belly white: tail cinereous: legs black."

THE GREENWICH SANDPIPER.

Grenovicensis.

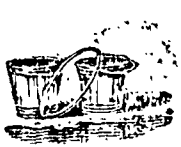
"SIZE of the Redshank: weight nearly eight ounces: length twelve inches and a half. Bill an inch and a half long, black: crown of the head reddish brown, streaked with black: nape, cheeks, and neck, ash colour; the middle of the feathers dusky down the shaft: lower part of the neck and back black; the feathers margined on the sides with pale ferruginous, and some of those of the back at the tips also: chin nearly white: fore part of the neck very pale ash colour, as far as the breast, which is of a dusky white: belly, sides, vent, and upper tail coverts on each side, and the whole of the under ones, white: lesser wing coverts ash colour; the greater, the same, obscurely margined with pale ferruginous: greatest tipped with white; under wing coverts pure white: prime quills dusky, the shafts more or less white; secondaries and scapulars nearly the colour of the back: the secondaries and primaries very little differing in length: the

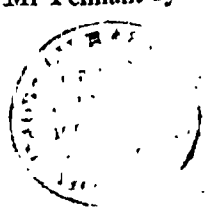
lower part of the back, rump, and middle of the tail coverts, ash colour: tail a little rounded at the end, brownish ash colour, somewhat mottled with brownish near the tips, and fringed near to the end with pale ferruginous: legs dusky olive green, bare an inch above the knee: the outer and middle toe connected at the base." The bird from which the above description was taken, was shot by Dr Leith, at Greenwich, on the 5th of August, 1785, and sent to Mr Latham, who considered it as a new species.

THE BLACK SANDPIPER.

Leucura.

"SIZE of a Thrush: the beak short, blunt at the point, and dusky: nostrils black: the irides yellow: the head small, and flatted at the top: the colour white, most elegantly spotted with grey: the neck, shoulders, and back mottled in the same manner, but darker, being tinged with brown; in some lights these parts appeared of a perfect black, and glossy: the wings were long: the quill-feathers black, crossed near their base with a white line: the throat, breast, and belly white, with faint brown and black spots of a longish form, irregularly dispersed; but on the belly become larger and more round: the tail short, entirely white, except the two middle feathers, which are black: legs long and slender, and of a reddish brown colour." This bird was shot in Lincolnshire; and the description communicated to Mr Pennant by Mr Bolton.





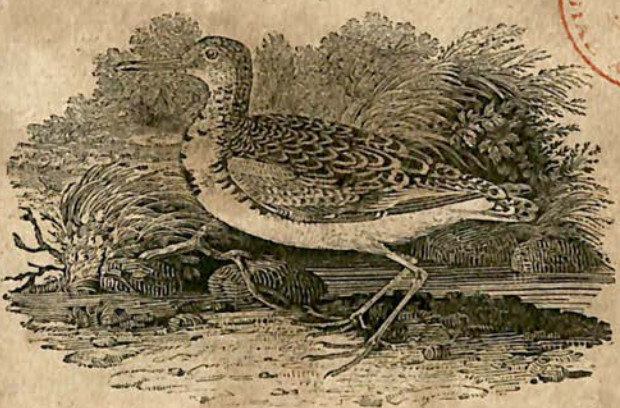
THE SPOTTED SANDPIPER,

OR SPOTTED TRINGA.

(*Tringa macularia*, Lin.—*La Grive d'eau*, Buff.)

THIS bird measures about eight inches in length. The bill is black at the tip, and fades into a reddish colour towards the base; a white streak is extended over each eye, and a brownish patch between them and the bill: the whole upper part of the plumage is of a glossy lightish brown, with green reflections: the head and neck are marked with longish small dark spots: on the back, scapulars, and wing coverts the spots are larger, and of a triangular shape: the rump is plain: the greater quills are dusky; secondaries tipped with white; as are also the greater and lesser coverts, which form two oblique white lines across the extended wings: the two middle feathers of the tail are greenish brown; the side ones white, crossed with dusky lines: the breast, belly, and vent are white, but in the female, spotted with brown: legs of a dirty flesh colour.

This species is not common in England. The specimen from which the foregoing figure was drawn, was shot in the month of August, on the bleak moors above Bellingham, in Northumberland; and the author is indebted for it, and many other favours of the same kind, at different times, to Mr John Wingate, of the Westgate, Newcastle.



THE RED-LEGGED SANDPIPER.

Tringa Erythropus.

This bird measures from the tip of the beak to the end of the tail, ten inches. The bill is an inch and three-eighths long, black at the tip, and reddish towards the base: the crown of the head is spotted with dark brown, disposed in streaks, and edged with pale brown and grey: a darkish patch covers the space between the corners of the mouth and the eyes: the chin is white; the brow and cheeks pale brown, prettily freckled with small dark spots: the hinder part of the neck is composed

of a mixture of pale brown, grey and ash, with a few indistinct dusky spots; the fore part, and the breast, are white, clouded with a dull cinnamon colour, and sparingly and irregularly marked with black spots, reflecting a purple gloss: the shoulder and scapular feathers are black, edged with pale rust colour, and have the same glossy reflections as those on the breast: the tertials are nearly of the same length as the quills, and are marked like the first annexed figure: the ridges of the wings are a brownish ash colour; the coverts, back, and rump are nearly the same, but inclining to olive, and the middle of each feather is of a deeper dusky brown: the primary quills are deep olive brown: the exterior webs of the secondaries are also of that colour, but lighter, edged and tipped with white, and the inner webs are mostly white towards the base: the tail coverts are glossy black, edged with pale rust colour, and tipped with white; but in some of them a streak of white passes from the middle upwards, nearly the whole length, as in the second figure. The tail feathers are lightish brown, except the two middle ones, which are barred with large spots of a darker hue: the belly and vent are white: legs bare above the knees, and red as sealing wax; claws black. The female is less than the male, and her plumage more dingy and indistinct: an egg taken out of her previous to stuffing, was surprisingly large, considering her bulk, being about the size of that of a Magpie, of a greenish white colour, spotted and blotched with brown, of a long shape, and pointed at the smaller end.

The foregoing figure and description were taken from a pair, male and female, which were shot on Rippengale fen, in Lincolnshire, on the 14th of May, 1799, by Major

Charles Dilke, of the Warwickshire cavalry, who also obligingly pointed out several leading features of these birds, in which they differ materially from the *Scolopax Calidris* of Linnæus, called here the Redshank or Pool-snipe. He says, "this bird is a constant inhabitant of the fens, and is known to sportsmen by its singular notes, which are very loud and melodious, and are heard even when the bird is beyond the reach of sight."

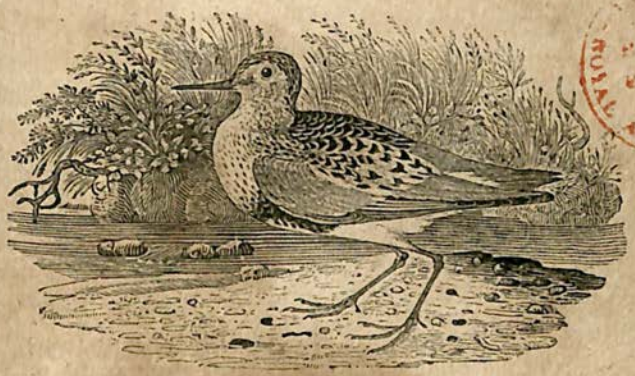
The description of this bird, which, it seems, is common in the fen countries, has been more particularly attended to, because it has not been described in any of the popular works on ornithology; at least, not so accurately as to enable a naturalist to distinguish it by the proper name.

THE RED SANDPIPER.

ABERDEEN SANDPIPER.

(Tringa Icelandica, Lin.*)*

LATHAM describes this bird in the following manner: "Length from eight to ten inches: bill brown, one inch and a half long, and a little bent downwards: head, hinder part of the neck, and beginning of the back, dusky, marked with red: fore part of the neck and breast cinereous, mixed with rust colour, and obscurely spotted with black: lesser wing coverts cinereous: quills dusky: secondaries tipped with white: the two middle tail feathers dusky; the others cinereous: legs long and black." The same author mentions another variety, which is called by Pennant the Aberdeen Sandpiper: it has the breast reddish brown, mixed with dusky: belly and vent white: in other respects it is like the Red Sandpiper, of which it is supposed by Latham to be the female, or a young bird. He adds, "the Red Sandpiper has appeared in great flocks on the coasts of Essex: the Aberdeen, in Scotland. They have also been met with on the coasts of New York, Labrador, and Nootka Sound; and are also found in Iceland. In summer they frequent the neighbourhood of the Caspian Sea; and also the river Don. It is perpetually running up and down on the sandy banks, picking up insects and small worms, on which it feeds."



THE DUNLIN.

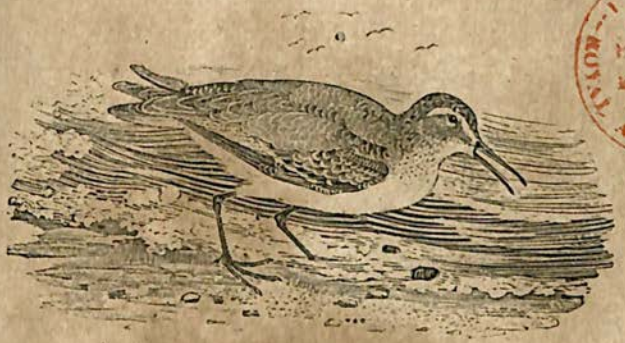
(Tringa Alpina, Lin.—*La Brunette*, Buff.)

This bird is nearly of the size of the Judcock, and its bill is of the same shape, but much shorter in proportion to the bulk: it may also be easily distinguished among its associates, the Purres, Dottrels, Sanderlings, &c. by the redness of the upper parts of its plumage; the ground colour of which, from the beak to the rump, is ferruginous, or rusty red; but the middle of each feather is black, and the edges of some of them are narrowly fringed with yellowish white, or ash coloured grey: in some specimens the lesser wing coverts are dingy ash coloured brown; in others they are of a clear brown, edged with ferruginous rather deeply: the quills and greater coverts are dark brown, the latter deeply tipped with white, which, together with the bases of the secondaries, forms an oblique bar across the extended wings: the primaries, except the first three, are edged on the exterior webs with white; their shafts are also mostly white, and each feather is sharply pencilled and distinctly

defined with a light colour about the tips: a darkish spot covers each side of the head from the corners of the mouth, and a pale streak passes from the bill over each eye: the throat and fore part of the neck to the breast, are of a yellowish white, mottled with brown spots: a dusky crescent-shaped patch, the feathers of which are narrowly edged with white, covers the breast, the horns pointing towards the thighs:* the belly and vent are white: the middle tail feathers black, edged with ferruginous; the others pale ash, edged with white: legs and thighs black. The female is rather larger than the male, but in other respects resembles him pretty nearly.

The above description and figure were taken from a pair, sent by the Rev. C. Rudston, of Sandhutton, near York, the 22d of April, 1799; and the author has been favoured with numbers of these and others of the same genus, by the Rev. H. Cotes, vicar of Bedlington; not two of which were exactly alike, probably owing to the difference of age or sex.

* In some specimens, supposed to be female, this patch was wanting.



THE PURRE.

(*Tringa Cinclus*, Lin.—*L'Alouette de Mer*, Buff.)

In the north of England these birds are called Stints, in other parts, the Least Snipe, Ox-Bird, Ox-Eye, Bull's-Eye, Sea-Lark, and Wagtail: they generally measure about seven inches and a half in length, and in breadth about fourteen; but sometimes they weigh and measure rather more. The bill is black, grooved on the sides of the upper mandible, and about an inch and a quarter in length: tongue of nearly the same length, sharp and hard at the point: a whitish line runs from the brow over each eye, and a brownish one from the sides of the mouth to the eyes, and over the cheeks: the fore part of the neck is pale ash colour, mottled with brown: the head, hinder part of the neck, upper part of the back, and the scapulars, are brownish ash colour, but the middle of the feathers on these parts is dark brown; hence there is a more or less mottled and streaked appearance in different birds. The scapular feathers, next the back, are deep brown, edged with bright ferruginous; tertials,

rump, and tail coverts nearly the same: bastard wing, primary and secondary quills, deep brown: lesser coverts brown, edged with yellowish white: greater coverts of nearly the same colour, but tipped with white: the throat, breast, belly, and vent, white: the two middle feathers of the tail are dusky; the rest ash coloured: legs, thighs, and toes black, inclining to green. The female has not the bright ferruginous-edged feathers on the upper scapulars, and her whole plumage is more uniformly of a brownish ash colour, mixed with grey.

The Purre, with others of the same genus, appears in great numbers on the sea-shores, in various parts of Great Britain, during the winter season: they run nimbly near the edges of the flowing and retiring waves, and are almost perpetually wagging their tails, whilst they are at the same time busily employed in picking up their food, which consists chiefly of small worms and insects. On taking flight, they give a kind of scream, and skim along near the surface of the water with great rapidity, as well as with great regularity: they do not fly directly forward, but perform their evolutions in large semicircles, alternately in their sweep approaching the shore and the sea, and the curvature of their course is pointed out by the flock's appearing suddenly and alternately in a dark or in a snowy white colour, as their backs or their bellies are turned to or from the spectator.*

The Purre leaves this country in the spring, but whither

* It is somewhat remarkable that birds of different species, such as the Ring-Dotterel, Sanderling, &c. which associate with the Purre, Dunlin, &c. should understand the signal, which, from their wheeling about altogether, with such promptitude and good order, it would appear is given to the whole flock.

it retires to breed is not yet known. It is said to be widely dispersed over both Europe and America.

By the kindness of his friends the author has been furnished with many of these birds; and on the most minute inspection, as has before been noticed in respect of others of this genus, they all differed in a greater or less degree from each other.*

* In a variety of this species, obligingly presented by George Strickland, Esq. of Ripon, the bill was bent a little downward; and the fore part of the neck and the breast were of a pale reddish buff colour: in other respects it did not differ materially.

There is reason to suspect that some ornithologists have denominated this bird the Dwarf Curlew; and probably the *Cincle*, or *L'Alouette de Mer*, of Buffon, and the variety of the Purre, described by Latham, only differ from the specimen whence the above drawing was taken, in age or sex.

THE LITTLE STINT.

LITTLE SANDPIPER, OR LEAST SNIPE.

(*Tringa pusilla*, Lin.—*La petite Alouette de Mer*, Brisson.)

THIS bird, the least of the Sandpiper tribe, in its figure and plumage nearly resembles the last two kinds. It weighs twelve pennyweights troy, and measures in length, extended, from the point of the beak to the end of the tail, nearly six inches; from tip to tip of its wings, about eleven inches and a half; and the bill, to the corners of the mouth, is five-eighths of an inch. The feathers on the crown of the head are black, edged with rust colour: it is marked, like most of the genus, by a light streak over each eye, and a darkish spot below and before them: the throat, fore part of the neck, and belly are white; and the breast is tinged with pale reddish yellow: the shoulders and scapulars are black, edged with white on the exterior webs of each feather, and on the interior with rust colour: back and tail dusky: legs slender, and nearly black.

This figure and description were taken from a bird shot by Robert Pearson, Esq. of Newcastle, on the 10th of September, 1801, the only one the author has seen. It will be remarked that it differs from Pennant and Latham's descriptions, simply in the feathers on the upper parts not being edged with black and pale rusty brown.

THE TURNSTONE.

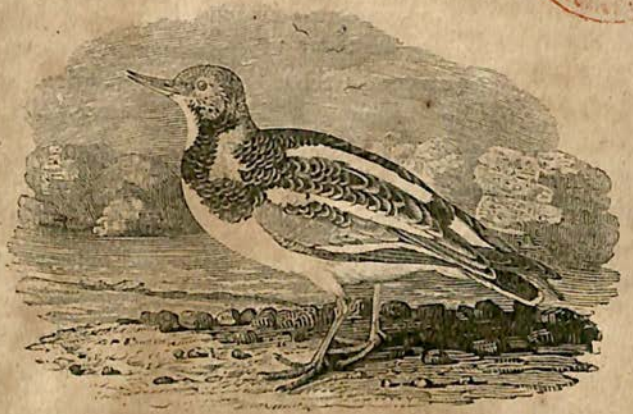
SEA DOTTEREL, OR HEBRIDAL SANDPIPER.

(Tringa interpres, Lin.—*Le Coulon-chaud,* Buff.)

This is a plump-made, and prettily variegated bird, and measures about eight inches and a quarter in length. The bill is black, straight, strong, and not more than an inch in length: the ground colour of the head and neck is white, with small spots on the crown and hinder parts; a black stroke crosses the forehead to the eyes: the auriculars are formed by a patch of the same colour, which,

pointing forward to the corners of the mouth, and falling down, is spread over the sides of the breast, whence ascends another branch, which, like a band, goes about the lower part of the neck behind.* The back, scapulars, and tertials are black, edged with rusty red: lesser coverts of the wings cinereous brown; greater coverts black, edged with ferruginous, and tipped with white: primary and secondary quills black, the latter white at the ends: the rump and tail coverts are white, crossed with a black bar: tail black, tipped with white: the fore part of the breast, belly and vent white: thighs feathered nearly to the knees: legs and feet red.

* In some specimens the lower part of the neck is white.



THE TURNSTONE.

(*Tringa morinella*, Lin.—*Le Coulon-chaud cendré*, Buff.)

This bird is like the preceding species in its size and shape. The bill is short, strong, thick at the base, and of a dark horn-colour, tinged with red: the crown and hinder part of the head are dusky, edged with greyish brown; the fore part, from the eyes to the bill, pale brown; a curved patch or band of the latter colour bounds the lower part of the neck, points forward, and falls down towards the points of the wings; between this band and the head, is a demi-ring of brownish black, which nearly surrounds the neck, a branch from which strikes upwards to the corners of the mouth, and another falls down, forming a kind of inverted gorget on the fore part of the neck, and sides of the breast: the colour of the throat is white, which tapers to a point on the fore part of the neck: the upper parts of the plumage are dusky, edged with rusty or brownish red; but some of the scapulars

next to the wings are partly edged with white: the tertials are long, and deeply edged and tipped with a fine pale rufous brown: the ridge of the wings and bastard quills are brownish black: the lesser coverts adjoining the ridge, white: primaries and secondaries, black,—the bases of the former, and tips of the latter, white; the greater coverts are also deeply tipped with white, which, when the wing is extended, forms a bar quite across it: the under parts of the plumage, the back, and tail coverts are white, excepting a black patch which crosses the rump. The tail consists of twelve black feathers, tipped with white, except the two middle ones, which are entirely black: the legs and toes are short, and of an orange red. The male excels the female in the beauty of his plumage; her pyebald marks are not so distinct, and her colours are uniformly more dull and confused.

These birds frequent the sea-shores in various parts of Great Britain, and have obtained their name from their manner of turning over small stones in quest of their prey, which lies concealed under them.

This species of Turnstone is chiefly confined to the northern, as is the former to the southern parts of Great Britain.

THE WATER HEN.

COMMON GALINULE, OR MOOR HEN.

(*Fulica chloropus*, Lin.—*La Poule d'Eau*, Buff.)

THE weight of this bird varies from ten and a half to fifteen ounces: the length from the tip of the beak to the end of the tail is about fourteen inches, the breadth twenty-two. The bill is rather more than an inch long, of a greenish yellow at the tip, and reddish towards the base, whence a singular kind of horny or membraneous substance shields the forehead as far as the eyes: this appendage to the bill is as red as sealing-wax in the breeding season; at other times it varies or fades into a white colour. The head is small and black, except a white spot under each eye, the irides of which are red: all the upper parts of the plumage are of a dark shining olive green, inclining to brown: the under parts are of a dark hoary

lead colour: vent feathers black; those on the belly and the thighs tipped with dirty white: the long loose feathers on the sides, which hang over the upper part of the thighs, are black, streaked with white: the ridge of the wing, outside feathers of the tail, and those underneath, are white: the upper bare part of the thighs is red; from the knees to the toes, the colours are different shades, from pale yellow to deep green: the toes are very long, the middle one measuring, to the end of the nail, nearly three inches; their under sides are broad, being furnished with membraneous edgings their whole length on each side, by which the bird is enabled to swim, and easily run over the surface of the slimy mud by the sides of the waters, where it frequents.

The body of the Water Hen is long and compressed at the sides, and the legs are placed far behind; its feathers are thickly set, or compact, and are bedded upon down. Like the Water Rail and Water Crake, it lives concealed, during the day, among reeds and willows, by the sides of rivers or rivulets, which it prefers to bogs and stagnant pools: like those birds, it can run over the surface of such waters as are thickly covered with weeds, and it dives and hides itself with equal ease: like the Water Crake, it also flirts up its tail when running, and flies with its legs hanging down, but is a better swimmer. In the evenings, it creeps, runs, and skulks by the margins of the waters, among the roots of the bushes, osiers, and long loose herbage which over-hang the banks, in quest of its food, which consists of water insects, small fishes, worms, aquatic plants and seeds. It is likewise granivorous, and, if killed in September or October, after having had the advantage of a neighbouring stubble, its flesh is very good.

The female makes her nest of a large quantity of withered reeds and rushes, closely interwoven, and is particularly careful to have it placed in a most retired spot, close by the brink of the water; and it is said, she never quits it without covering her eggs with the leaves of the surrounding herbage. Pennant and Latham say, she builds her nest upon some low stump of a tree, or shrub, by the water's side: no doubt she may sometimes vary the place of her nest, according as particular circumstances may command, but she generally prefers the other mode of building it. She lays six or seven eggs at a time, and commonly has two hatchings in a season. The eggs are nearly two inches in length, and are irregularly and thinly marked with rust-coloured spots on a yellowish white ground. The young brood remain but a short time in the nest, under the nurturing care of the mother; but as soon as they are able to crawl out, they take to the water, and shift for themselves.

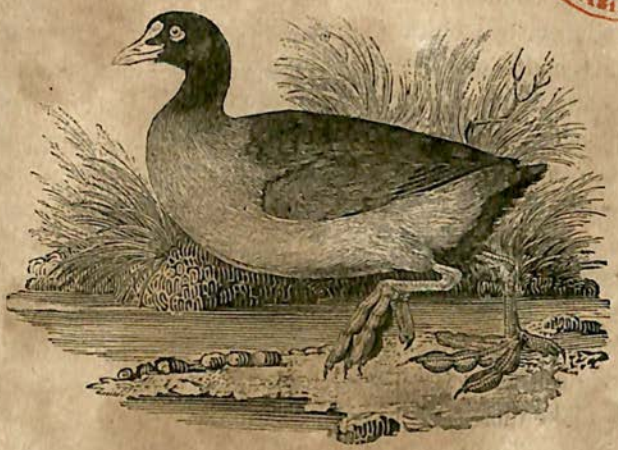
Although the Water Hen is no where very numerous, yet one species or other of them is met with in almost every country in the known world. It is not yet ascertained whether they ever migrate from this to other countries, but it is well known that they make partial flittings from one district to another, and are found in the cold mountainous tracts in summer, and in lower and warmer situations in winter.

On examination of several specimens of this bird, in full feather, they were found, like most birds of plain plumage, very little different from each other.

OF THE COOT.

Bill strong, thick, sloping to a point; the base of the upper mandible rising far up into the forehead: both mandibles of equal length: nostrils inclining to oval, narrow, short: body compressed: wings and tail short: toes long, furnished with broad scalloped membranes between each joint, on each side; the inner toe has two, the middle three, and the outer four scallops: and the hinder toe, one plain membrane adhering to it its whole length.

The Coot is met with in various parts of Europe, Asia, and America; its flesh is of a strong *marshy* taste; for which, by some people, it is much liked; while others, for the same reason, hold it in little estimation.



THE COOT,

OR, BALD COOT.

(Fulica atra, Lin.—*La Foulque, ou Morrelle,* Buff.*)*

THIS bird generally weighs, when in full condition, about twenty-eight ounces, and measures fifteen inches in length. The bill is of a greenish white colour, more than an inch and a quarter long: a callous white membrane, like that of the Water Hen, but larger, is spread over the forehead, which also, as in that bird, changes its colour to a pale red in the breeding season: irides red: the upper parts of its plumage are black, except the outer edges of the wings, and a spot under each eye, which are white: the under parts are of a hoary dark ash or lead colour. The skin is cloathed with a thick down, and covered with close fine feathers: the thighs are placed far behind, are fleshy and strong, bare, and yellow above the knees: the legs and toes are commonly of a yellowish green, but sometimes of a lead colour.

The Common Coot has so many traits in its character, and so many features in its general appearance like the Rails and Water Hens, that to place it after them, seems a natural and easy gradation: Linnæus and other ornithologists, however, describe it as of a genus distinct from those birds, and from the waders in general, on account of its being fin-footed, and its constant attachment to the waters, which, indeed, it seldom quits. With it naturalists begin the numerous tribe of swimmers, and rank it among those that are the most compleatly dependent upon the watery element for their support: it swims and dives with as much ease as almost any of them; and also, like those which seldom venture upon land, it is a bad traveller, and may be said not to walk, but to splash and waddle between one pool and another, with a laboured, ill-balanced, and aukward gait.

These birds, like those of the preceding kinds, skulk and hide themselves, during the day, among rushes, sedges, and weeds, which grow abundantly in the loughs and ponds, where they take up their constant abode: they rarely venture abroad, except in the dusk, and in the night, in quest of their food, which consists of the herbage, seeds, insects, and the slippery inhabitants of stagnant waters. It seldom happens that the sportsman and his dog can force the Coot to spring from its retreat; for it will, in a manner, bury itself in the mud rather than take wing, and when it is very closely pursued, and compelled to rise, it does this with much *flustering* and apparent difficulty.

This species is met with in Great Britain, at all seasons of the year, and it is generally believed that it does not migrate to other countries, but changes its stations, and

removes in the autumn from the lesser pools or loughs, where the young have been reared, to the larger lakes, where flocks assemble in the winter. The female commonly builds her nest in a bush of rushes, surrounded by the water:* it is composed of a great quantity of coarse dried weeds, well matted together, and lined within with softer and finer grasses: she lays from twelve to fifteen eggs at a time, and commonly hatches twice in a season: her eggs are about the size of those of a pullet, and are of a pale brownish white colour, sprinkled with numerous small dark spots, which, at the thicker end, seem as if they had run into each other, and formed bigger blotches.

As soon as the young quit the shell, they plunge into the water, dive, and swim about with great ease; but they still gather together about the mother, and take shelter under her wings, and do not entirely leave her for some time. They are at first covered with sooty-coloured down, and are of a shapeless appearance: while they are in this state, and before they have learned, by experience, to shun their foes, the Kite, Moor Buzzard, and others of the Hawk tribe, make dreadful havoc among them;† and this, notwithstanding the numerous brood, may account for the scarcity of the species.

* A Bald Coot built her nest in Sir William Middleton's lake, at Belsay, Northumberland, among the rushes, which were afterwards loosened by the wind, and, of course, the nest was driven about, and floated upon the surface of the water, in every direction; notwithstanding which, the female continued to sit as usual, and brought out her young upon her moveable habitation.

† The Pike is also the indiscriminate devourer of the young of all these water birds.

THE GREATER COOT.

(*Fulica aterrima*, Lin.—*La Grande Foulque, ou la Macroule*, Buff.)

"THIS is of a larger size than the last, but differs not in the colour of the plumage, except that it is blacker. *Brisson* distinguishes the two by the colour of the bare part of the forehead, which is in this white: and the garters, which are of a deep red.* This bird is said to be found in *Lancashire* and *Scotland*. It should seem to be a mere variety of the former, did not authors join in advancing the contrary. They are more plentiful on the continent, being found in *Russia* and the western part of *Siberia* very common; and are also in plenty at *Sologne* and the neighbouring parts, where they call it *Judelle*. The people eat them on *maigre days*, and the flesh is much esteemed." *Latham*.

* "This can be no distinction, as birds differ in the colour of these parts according to the season." *Latham*.

OF THE PHALAROPE.

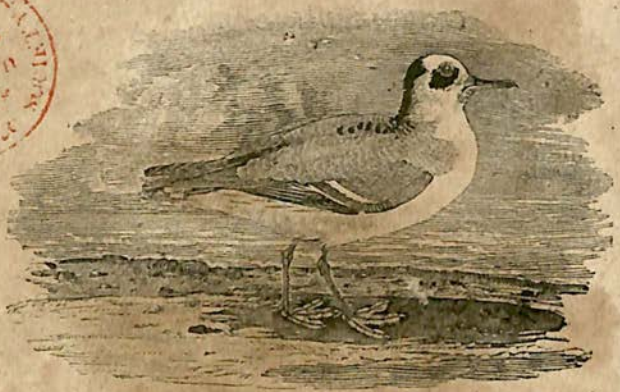
Bill straight and slender; nostrils minute; body and legs like the Sandpiper; toes furnished with scalloped membranes.

THE RED PHALAROPE.

(*Tringa hyperborea*, Lin.—*Le Phalarope cendre*, Buff.)

The bill is black, slender, straight, about an inch long, and bent a little downwards at the tip. A dusky stripe passes through the eyes to the back part of the head, where it is joined to a reddish one above it, which falls down on the sides of the neck: the chin and throat are white; the top of the head, hinder part of the neck, breast, and wing coverts of a lead colour, darkest on the breast: the back and scapulars are the same, but striped with yellowish rusty edges: the greater coverts are crossed with a white stripe; the quills dusky: the tail coverts are barred with black and white: tail short, and of a cinereous colour: belly white: legs black.

This species is rarely met with in England; but it is said to be pretty common on the continent. It is, however, a native of the arctic regions, and only migrates southward to shun the long dreary freezing period of the winter months. In summer it returns to breed and rear its young, and has been met with by voyagers and travellers, in Hudson's Bay, Greenland, Spitzbergen, &c. It is seen in Greenland in April, and is said to leave it in September.



THE GREY PHALAROPE.

COOT-FOOTED TRINGA, OR SCALLOP-TOED SANDPIPER.

(*Tringa Lobata*, Lin.—*Le Phalarope à festons dentiles*, Buff.)

THE bill of this bird is nearly an inch long: the upper mandible is of a dusky horn colour, grooved on each side, and flatted near the tip; the under one is orange towards the base. The eyes are placed high in the head; there is a dark patch underneath each, and the same on the hinder part of the head and neck. The shoulder and scapular feathers are of a fine lead colour, edged with white: fore part of the head, throat, neck, and breast, white: the belly is also white, but slightly dashed with pale rust colour: the greater coverts are broadly tipped with white, which forms an oblique bar across the wings, when closed: some of the first and secondary quills are narrowly edged with white: on the middle of the back the feathers are brown, edged with bright rust colour: on the rump there are several feathers of the same colour, but mixed with others of white, rufous, and lemon.

The wings are long, and, when closed, reach beyond the tail: the primary quills are dusky, the lower part of their inner sides white; secondaries tipped with white: tail dusky, edged with ash colour: legs black. The scalloped membranes on its toes differ from those of the Red Phalarope, in being finely serrated on their edges.

This curious and pretty bird, like the preceding, is a native of the northern regions of Europe, Asia, and America, and migrates southward in the winter. It has seldom been met with in any part of the British isles. Ray, however, saw one at Brignal, in Yorkshire; and Mr Pennant mentions one which was shot in the same county; Mr Tunstall another, shot at Staveley, in Derbyshire;—and the specimen from which this drawing and description were taken, was shot near the city of Chester, by Lieutenant-Colonel Dalton, of the 4th regiment of dragoons, on the 14th of October, 1800.

OF THE GREBES.

The bills of this genus are compressed on the sides, and though not large, are firm and strong, straight and sharp-pointed: nostrils linear: a bare space between the bill and the eyes: tongue slightly cloven at the end: body depressed: feathers thickly set, compact, very smooth and glossy: wings short; scapulars long; no tail: legs placed far behind, much compressed, or flattened on the sides, and serrated behind with a double row of notches; toes furnished on each side with membranes; the inner toes broader than the outer; the nails broad and flat.

This genus is ranked by Ray and Linnæus with the Diver and Guillemot; but as the Grebes differ materially from those birds, Brisson, Pennant, and Latham have separated them.

The Grebes are almost continually upon the water, where they are remarkable for their agility: at sea they seem to sport with the waves, through which they dart with the greatest ease, and, in swimming, slide along, as it were, without any apparent effort, upon the surface, with wonderful velocity; they also dive to a great depth in pursuit of their prey. They frequent fresh water lakes and inlets of rivers, as well as the ocean, to which they are obliged to resort in severe seasons, when the former are bound up by the ice. No cold or damp can penetrate their thick close plumage, which looks as if it were glazed on the surface, and by which they are enabled, while they have open water, to brave the rigours of the coldest winter. They can take wing from the water, or drop from an eminence, and fly with great

swiftness to a considerable distance; but when they happen to alight on the land, are very helpless, for they cannot either rise from the flat surface of the ground, or make much progress in walking upon it. On shore they sit with the body erect, commonly upon the whole length of their legs, and in attempting to regain the water, they aukwardly waddle forward in the same position; and if by any interruption, they happen to fall on the belly, they sprawl with their feet, and flap their short wings as if they were wounded, and may easily be taken by the hand, for they can make no other defence than by striking violently with their sharp-pointed beak. They live upon fish, and, it is said, also upon fresh-water roots and sea-weeds. They are generally very fat and heavy in proportion to their size.

The females generally build their nests in the holes of the rocky precipices which overhang the sea-shores; and those which breed on lakes, make theirs of withered reeds and rushes, &c. and fix it among the growing stalks of a tuft or bush of such like herbage, close by the water's edge. They lay from two to four eggs at one hatching.

The skins of these birds are dressed with the feathers on, and made into warm beautiful tippets and muffs: the under part only is used for this purpose; and a skin of one of the species sells as high as fourteen shillings.

THE GREAT-CRESTED GREBE.

GREATER-CRESTED DOUCKER, CARGOOSE, ASH-COLOURED LOON, OR GAUNT.

(*Colymbus cristatus*, Lin.—*La Grebe huppé*, Buff.)

This bird is the largest of the Grebes, weighing about two pounds and a half, and measuring twenty-one inches in length, and thirty in breadth. The bill is about two inches and a quarter long, dark at the tip, and red at the base: the bare stripe, or lore, between the bill and the eyes, is in the breeding season red, but afterwards changes to dusky: irides, fine pale crimson. The head, in adult males, is furnished with a great quantity of feathers, which form a kind of ruff, surrounding the upper part of

the neck; those on each side of the head, behind, are longer than the rest, and stand out like ears: this ruff is of a bright ferruginous colour, edged on the under side with black. The upper parts of the plumage are of a sooty or mouse-coloured brown; the under parts of a glossy or silvery white: the inner ridge of the wing is white; the secondaries of the same colour, forming an oblique bar across the wings, when closed: the outside of the legs is dusky, the inside and toes of a pale green.

This species is common in the fens and lakes in various parts of England, where they breed and rear their young. The female conceals her nest among the flags and reeds which grow in the water, upon which it is said to float, and that she hatches her eggs amidst the moisture which oozes through it. It is made of various kinds of dried fibres, stalks and leaves of water plants, and (Pennant says) of the roots of bugbane, stalks of water-lily, pond-weed, and water-violet; and he asserts, that when it happens to be blown from among the reeds, it floats about upon the surface of the open water.

These birds are met with in almost every lake in the northern parts of Europe, as far as Iceland, and southward to the Mediterranean; they are also found in various parts of America.

THE TIPPET GREBE.

GREATER DOBCHICK, OR GREATER LOON.

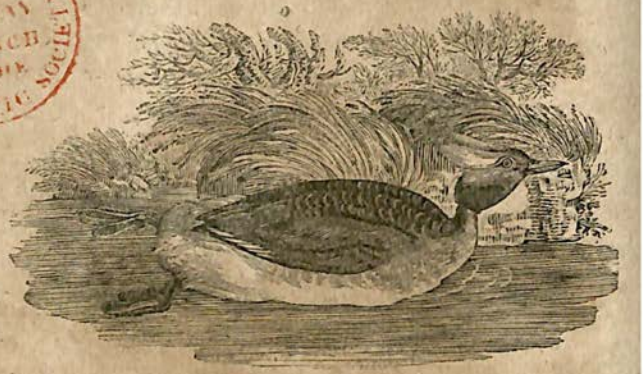
(*Colymbus urinator*, Lin.—*La Grebe*, Buff.)

This bird differs from the last only in being somewhat less, in having its neck, in most specimens, striped downward on the sides with narrow lines of dusky and white, and in having no crest.

Modern ornithologists begin to suspect that the Tippet Grebe is the female of the Great-crested Grebe, or a young bird of that species. Latham says, "It is with some reluctance that we pen our doubts concerning the identity of this, as a species, at least as being distinct from the Great-crested Grebe, in contradiction to what former authors have recorded on the subject. It is certain that the last-named bird varies exceedingly at different periods of life; and we are likewise as certain that the birds which have been pointed out to us as the Geneva Grebes, have been no other than young ones of the Great-crested, not having yet attained the crest; and whoever wil

compare Brisson's three figures of the birds in question, will find (the crest excepted) that they all exactly coincide, allowing for their different periods of age. We have been further led into this opinion from the circumstance of a large flock of them, which appeared in various parts of the shores of the Thames, from Gravesend to Greenwich, last winter, many of which were killed, and came under our inspection: among them we found the greatest variety about the head, from being perfectly without a crest, to the most complete one, with all the intermediate stages above-mentioned."

In the progress of this work, the author has been favoured, by sporting friends, with several of these birds, which differed from each other in the manner described by Mr Latham, and induced him to adopt the opinion of that gentleman concerning them.



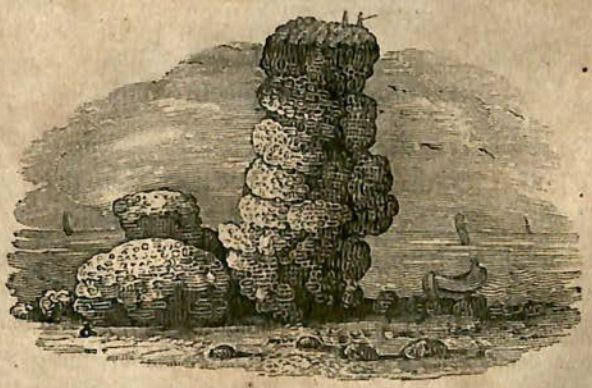
THE EARED GREBE.

OR EARED DOBCHICK.

(*Colymbus auritus*, Lin.—*La petite Grebe huppé*, Buff.)

This bird measures about thirteen inches in length, and twenty-two from tip to tip of the wings, and weighs nineteen ounces. The under mandible towards the base is red, the rest of the bill black, with white tips; it measures on the upper ridge scarcely an inch: lore and irides red: the head is thickly set and enlarged with feathers of a sooty black colour, except two large, loose and spreading orange-coloured tufts, which take their rise behind each eye, flow backward, and nearly meet at their tips: the neck and upper parts of the plumage are black; the under parts of a glossy white: the sides a rusty chesnut colour: legs greenish black. The male and female are nearly alike, only the latter is not furnished or puffed up about the head with such a quantity of feathers.

This species is not numerous in the British Isles. Pennant says they inhabit and breed in the fens near Spalding, in Lincolnshire, and that the female makes a nest not unlike that of the Crested Grebe, and lays four or five small white eggs. The Eared Grebe is found in the northern regions of Europe, as far as Iceland, and is also met with in southern climates. The circumnavigator Bougainville says it is called the "Diver with Spectacles" in the Falkland Islands.



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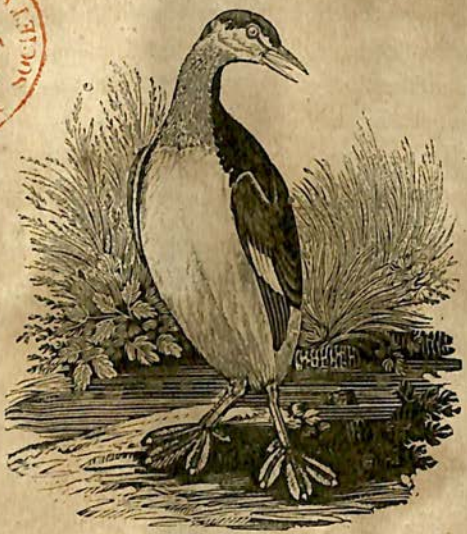


THE DUSKY GREBE.

OR BLACK AND WHITE DOBCHICK.

(Nigricans, ——. La petite Grebe, Buff.)

This species measures about an inch less in length, and two in breadth, than the last. The bill is more than an inch long, and of a pale blue colour, with reddish edges: lore and orbits red: irides bright yellow: the upper part of the head, hinder part of the neck, scapulars, and rump, are of a dark sooty, or a mouse-coloured brown: the feathers on the back are nearly of the same colour, but glossy, and with greyish edges: the ridge of the wings and the secondary quills are white; the rest of the wing dusky. There is a pale spot before each eye; the cheeks and throat are white: the fore part of the neck is light brown; and the breast and belly are white and glossy,

like satin: the thighs and vent are covered with dirty white downy feathers: the legs are white behind, dusky on the outer sides, and pale blue on the inner sides and shins: the toes and webbed membranes are also blue on the upper sides, and dark underneath.

This description was taken from a very perfect bird, caught on Sand Hutton Car, near York, on the 28th of January, 1799, by the Rev. C. Rudston: other specimens of this species have differed in the shades of their plumage and colour of the bill: in some the upper mandible is yellow, from the nostrils to the corners of the mouth, and the under one entirely of that colour.

THE RED-NECKED GREBE.

(*Colymbus subcristatus*, ——. *Le Jougris*, Buff.)

This bird measures from the bill to the rump seventeen inches, to the end of the toes twenty-two, and weighs eighteen ounces and three-quarters. The bill is about two inches long, dusky or horn-coloured on the ridge and tip, and on the sides of it, towards the corners of the mouth, of a reddish yellow; the underside of the lower mandible is also of the latter colour: lore dusky: irides dark hazel: the cheeks and throat are of a dirty or greyish

white: the upper part of the head is black, with a greyish cast; and the feathers are lengthened on each side on a line with the eyes backward, so as to look like a pair of rounded ears; these it can raise or depress at pleasure: the fore part and sides of the neck are of a dingy brown, mixed with feathers of a bright rusty red: the upper parts of the plumage are of a darkish mouse-coloured brown, lightest on the wing coverts, deepest on the scapulars and rump, and edged with grey on the shoulders; the under parts are of a glossy white, like satin, mottled with indistinct brownish spots: primary quills brownish tawny, with dark-coloured tips; secondaries white: outer sides of the legs dusky, inner sides sallow green; webs of the outer toes flesh colour, middle ones redder, and the inner ones orange.

Pennant supposes the Red-necked Grebe to be only a variety of the Great-crested Grebe; but Latham, who had been furnished with several specimens, is of opinion that it is a distinct species. He describes the adult males, in full feather, as having their necks of an uniform reddish chesnut; and the younger birds, when they have not obtained their full plumage, to be only partially spotted on their necks with that colour.

The foregoing figure and description were taken from a specimen, the gift of George Silvertop, of Minsteracres, Northumberland, Esq. January 16th, 1802.

THE LITTLE GREBE.

DOBCHICK, SMALL DOUCKER, DIPPER, OR DIDAPPER.

(*Colymbus minutus*, Lin.—*Le Castagneux*, Buff.)

This is the least of the Grebe tribe, weighing only between six and seven ounces, and measuring to the rump ten inches, to the end of the toes thirteen, and about sixteen from tip to tip of the wings. The bill is scarcely an inch long, of a dusky reddish colour: irides hazel; the head is thickly cloathed with a downy kind of soft feathers, which it can puff up to a great size, or lay down flat at pleasure: the cheeks are mostly of a bay colour, fading towards the chin and throat into a yellowish white. The neck, breast, and all the upper parts of the plumage, are of a brown or chesnut colour, tinged with red, lightest on the rump: the belly is white, clouded with ash colour, mixed with red; thighs and vent grey: greater quills dark brown; the lesser white on their inner webs: legs dirty olive green.

The little Grebe is a true aquatic, for it seldom quits the water, nor ventures beyond the sedgy margins of the lake where it has taken up its abode. It is a most excellent diver, and can remain a long while under water, in pursuit of its prey, or to shun danger. It is found in

almost every lake, and sometimes upon rivers, but seldom goes out to sea. Its food is of the same kind, and its habits much the same as those of the other Grebes.

Ornithologists and sportsmen describe the nest of this bird as being of a large size, and composed of a very great quantity of grass and water plants, at least a foot in thickness, and so placed in the water, that the female hatches her eggs amidst the continual wet, in which they were first laid: and it is conjectured that the natural warmth of her body occasions a fermentation of the herbage, which greatly aids the incubation. She lays from four to six eggs, of a yellowish dull white colour, and is said to cover up, or hide them, with the surrounding leaves, every time she has occasion to stir abroad.

This species of the Grebe is an inhabitant of both Europe and America. In several specimens furnished by the author's sporting friends, the difference was very trifling, except that the plumage of some was more dashed with red than that of others.

THE BLACK-CHIN GREBE.

This bird is described as being larger than the last. "Chin black: fore part of the neck ferruginous: hinder part mixed with dusky: belly cinereous and silver intermixed. Inhabits Tiree, one of the Hebrides." *Latham.*

OF THE AVOSET.

Bill long, slender, very thin, depressed, and bending considerably upwards: nostrils narrow and pervious: tongue short: legs very long: feet palmated; the webs deeply indented from the nails towards their middle; back toe placed high, and very small.

The Avoset is migratory, and is met with in temperate climates, on the shores in various parts of Europe.

THE AVOSET.

SCOOPER, CROOKED-BILL, OR YELPER.

(Recurvirostra Avosetta, Lin.—*L'Avocette,* Buff.*)*

This bird, which is the only British species of Avoset, does not much exceed the Lapwing in the bulk of its body; but, from the length of its legs, it is much taller.

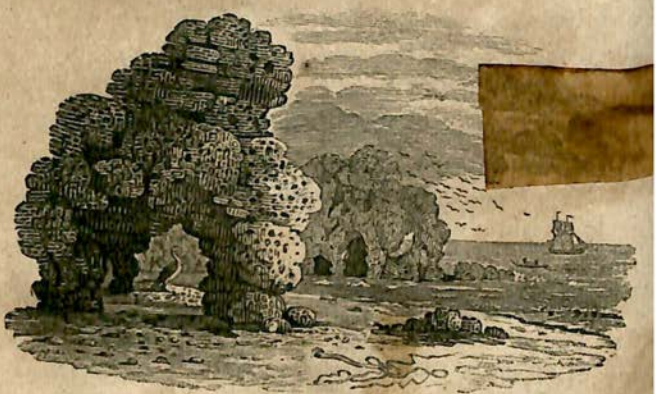
It measures about eighteen inches in length, to the end of the toes twenty-two, and from tip to tip thirty, and weighs from twelve to fourteen ounces. The bill is black, about three inches and a half long, and of a singular conformation, looking not unlike flexible flat pieces of whalebone, curved upwards to the tip: the irides are hazel: the head round, black on the upper part to below the nape of the neck: above and beneath each eye, in most specimens, there are small white spots; but in the one from which the above figure was taken, a streak of that colour passed over each eye towards the hinder part

of the head. The thighs are naked, and, as well as the legs and feet, are of a fine pale blue colour. The whole plumage of the Avoset is white, intersected with black; and, like most of the variegated or pyebald birds, the patches of these colours are not placed exactly the same in every individual; therefore, as the bird cannot be mistaken, a more minute description is unnecessary.

These birds are common in the winter about the lakes, mouths of rivers, and marshes, in the southern parts of England; and they assemble in large flocks on the fens, in the breeding season. When the female is frightened off her nest, she counterfeits lameness; and when a flock is disturbed, they fly with their necks stretched out, and their legs extended behind, over the head of the spectator, much in the same way as the Peewit or Lapwing, making a shrill noise, and uttering a yelping cry of *twit, twit*, all the time. The places where they have been feeding may be traced out by the semicircular marks left in the mud or sand by their bills in scooping out their food, which consists of spawn, worms, insects, &c. Latham says, "they lay two eggs, the size of those of a Pigeon, an inch and three quarters in length, of a cinereous grey, singularly marked with deep brownish dark patches, of irregular sizes and shapes, besides some under markings of a dusky hue." They keep near the shore, wading about, up to the belly in the water, and sometimes swimming. In all their motions they are smart, lively, and volatile, and do not remain long stationary in one spot.

OF THE AUK, OR PENGUIN.

Bill strong, thick, convex, compressed on the sides: nostrils linear, placed parallel to the edge of the bill: tongue almost as long as the bill: toes, three in number, all placed forwards.



THE GREAT AUK.

NORTHERN PENGUIN, OR GAIR-FOWL.

(*Alca impennis*, Lin.—*Le Grand Pingoin*, Buff.)

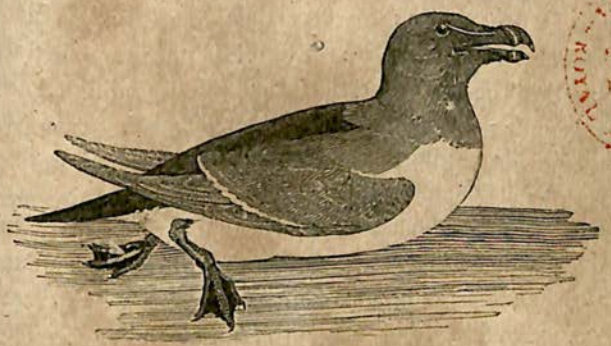
THE length of this bird, to the end of the toes, is three feet. The bill is black, and four inches and a quarter long; both mandibles are crossed obliquely with several ridges and furrows, which meet at the edges. Two oval-shaped white spots occupy nearly the whole space between the bill and the eyes: the head, back part of the neck, and all the upper parts of the body and wings are covered with short, soft, glossy black feathers, excepting a white stroke across the wings, formed by the tips of the lesser

quills: the whole under side of the body is white: the wings are very short, not exceeding four inches and a quarter from the tips of the longest quill feathers to the first joint: legs black, short, and placed near the vent.

From the inability of these birds to fly or walk, they are seldom seen out of the water, and it is remarked by seamen, that they never wander beyond soundings. The female lays only one egg, which she deposits and hatches on a ledge close to the sea-mark: it is of a very large size, being about six inches in length, of a white colour, streaked with lines of a purple cast, and blotched with dark rusty spots at the thicker end.

This species is not numerous any where: it inhabits Norway, Iceland, the Ferro Isles, Greenland, and other cold regions of the north, but is seldom seen on the British shores.

The Gair-fowl described by Martin, in his voyage to St Kilda, and account of that island, published in 1698, differs in some particulars from the foregoing: he says, "it is larger than the Solan Goose, black, red about the eyes, has a large white spot under each eye, a long broad bill; stands erect, has short wings, cannot fly; lays one egg, twice the size of that of the Solan Goose, variously speckled with black, green, and dusky spots."



THE RAZOR-BILL.

AUK, MURRE, FALK, MARROT, OR SCOUT.

(*Alca torda*, Lin.—*Le Pingoin*, Buff.)

THE wings of this species are more furnished with feathers, and longer in proportion to the size of the bird, than those of the last; they measure, extended, about twenty-seven inches: the length of the bird, from bill to tail, is eighteen. The bill is black, strong, curved towards the point, and sharply edged; the upper mandible is crossed with four transverse grooves, and the under one with three, the broadest of which is white, and forms a band across them both: the inside of the mouth is yellow: the base of the bill is covered with feathers a great way forward, upon which, on each side, is placed a singular, narrow, white streak, which passes to the corner of the eye; another white stripe, or bar, formed by the tips of the lesser quills, crosses each wing obliquely: the upper part of the head, hinder part of the neck, back, rump, and tail coverts are of a soft glossy black, and look something like velvet: the cheeks, chin, and throat are

of a dull sooty dark brown: ridge and pinions of the wings, light brown: coverts and quills dusky: legs black.

These birds associate with the Guillemots, and also breed in the same places. About the beginning of May they take possession of the highest impending rocks, for the purpose of incubation, and upon the ledges of these rocks they congregate in great numbers, sitting closely together, tier above tier, and row above row: there they deposit their single large egg on the bare rock; and notwithstanding the numbers of them, which are thus as it were mixed together, yet no confusion takes place, for each bird knows her own egg, and hatches it in that situation.

It has often excited wonder that as the eggs have no nest or bedding to rest upon, they are not rolled off into the sea by gales of wind, or upon being touched by the birds: it is also said, that if they are removed by the human hand, it is impossible, or at least extremely difficult, to replace them in their former steady situation. This is accounted for by some ornithologists who assert that the egg is fixed to the spot upon which it is first laid, by a glutinous substance with which the shell is covered, and which keeps it firmly in its place until the young is produced. The egg of this Auk is three inches long, of a greenish white colour, irregularly marked with dark spots. They are gathered, with other kinds, in great numbers, by the neighbouring inhabitants, from the rocky promontories in various parts of the British isles, but particularly in the north, where the men who are accustomed to gather these eggs, are let down over the precipices by ropes, which are tied to, or held by, their companions above.

The foregoing figure and description were taken from a specimen in perfect plumage, shot on Jarrow Slake, near the mouth of the Tyne, in May, by the late Mr Thomas Walton, of Farnacres, to whose memory, for many favours of the same kind, the author feels a large debt of gratitude.

THE BLACK-BILLED AUK.

(*Alca Pica*, Lin.—*Le Petit Pingoin*, Buff.)

LATHAM says, "This weighs eighteen ounces: is in length fifteen inches: breadth twenty-four. The bill is not above half the breadth of the Razor-bill's, and very little curved, perfectly smooth throughout the whole of its surface, except a slight indentation at the base: inside of the mouth of a pale flesh-colour: the top of the head, taking in the eyes, part of the neck, the back, wings, and tail, are black: on the sides of the neck the black comes forward so as almost to meet on the fore part: the sides of the head, throat, fore part of the neck, and all beneath, white: from behind the eye a dusky black mark tends to the hinder part of the head, as in the Lesser Guillemot; the white on the sides of the head is less pure than that on the under parts: all the secondary quills are tipped with white; and the primaries are of a deeper black than the others: legs brownish black." Linnæus says the legs are red, but no other author records it. Latham further observes, "This, from its external marks, should appear to be a different species from the Razor-bill, but we are pretty certain it is no other than the young of that bird."

THE PUFFIN.

MULLET, COULTERNEB, SEA-PARROT, POPE, OR WILLOCK.

(*Alca Arctica*, Lin.—*Le Macareux*, Buff.)

THE Puffin weighs about twelve ounces, and measures twelve inches in length, and twenty-one in breadth. Its singular bill looks not unlike a kind of sheath slipped over both mandibles, and, from its appearance, the bird is not improperly named Coulterneb, or Knife-bill. At the base, where it is about an inch and a half in depth, it is rimmed with a white callous border, the two corners of which project above the brow, and below the chin. It is about the same in length, curved towards the point, compressed vertically, very flat, and transversely furrowed on the sides; the half of it adjoining to the head is smooth, and of a fine lead-coloured blue; the other part, to the tip, red: the nostrils are placed in long narrow slits, near the edge of the bill: the corners of the mouth,

when closed, are curiously puckered, and form a kind of small star, or rose: the eyes are protected by small callous protuberances, both above and below: the edges of the eye-lids are crimson: irides grey: the chin and cheeks are white, bordered with grey, the latter much puffed up with feathers, which makes the head look large and round. From behind the corner of each eye, the feathers are curiously separated, forming a narrow line, which reaches to the hinder part of the head: the crown of the head, hinder part of the neck, and upper part of the plumage are black, and a collar of the same colour encircles the neck: the under parts are white: the tail consists of sixteen feathers: the legs are reddish orange.

The Puffin, like others of the same genus, takes wing with great difficulty, and walks upon the whole length of the leg and foot, with a wriggling awkward gait. In tempestuous weather it takes shelter in caverns and holes in the nearest rocks, or in those made by the rabbit on the beach, among the *bent* grass, in which it sits dozing, in snug security, till the return of calm weather; for these birds cannot brave the storm, and it is not uncommon, when they have been overtaken by it, to find them drowned and cast on shore. Various kinds of fish, such as small crabs, shrimps, sprats, and also sea-weeds, are said to be the food upon which they live; but it is evident, from the structure, great strength, and sharpness of the bill, that they are furnished with powers to crush and pluck out other kinds of shell-fish, which ornithologists have not noticed.

The female makes no nest; she deposits her single whitish coloured egg upon the bare mould, in a hole dug out and formed in the ground by her mate and herself,

for that purpose; or in those that they find ready made by the rabbits, which they easily dislodge. The parent birds are very attentive to their young, which they will defend to the last, by severely biting whatever enemy attempts to molest them, and will suffer themselves to be taken rather than desert them: and yet, notwithstanding this uncommon attachment, when the day of migration comes, the young ones which are not able to fly are left behind, and mostly perish of want, or are destroyed by birds of prey.

The bite of these birds is very severe: one sent to the author, in a box covered with netting, caught hold of the finger of a poor man, and brought away the fleshy part, as if it had been cut out with a knife: but they may be tamed, and soon become familiar. They are fed on fish and other animal substances.

These birds are spread over various parts of the northern world, and are met with on almost all the rocky cliffs on the coasts of Britain and Ireland, and on many of the surrounding isles, in immense numbers. They congregate in flocks of a magnitude regulated by the accommodations afforded them at their breeding places, at which they first assemble early in April, but do not settle to prepare for the business of incubation till May. They hatch their young in the beginning of July; from which time until nearly the middle of August, they are employed in nurturing and rearing their brood: when this is accomplished, the whole associated swarm leaves the place at once, and pursues its route to other regions, more suited to their future exigencies, there to spend the remainder of the varied year.

The foregoing figure and description were taken from

a perfect specimen of an old bird, the present of Mrs Cheney, late Miss Harriot Carr, of Dunston Bank; and on comparing it with several others, it appeared evident that their bills increase in size with their age.

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THE LITTLE AUK.

LITTLE BLACK AND WHITE DIVER, GREENLAND DOVE, OR SEA-TURTLE.

(*Alca alle*, Lin.—*Le petit Guillemot*, Buff.)

This is a plump round-shaped bird, and measures about nine inches in length. The bill is black, short, thick, strong, and convex; it is feathered from the corners of the mouth half way forward towards the point. The crown of the head is flat and black; all the upper parts of the plumage are of the same colour, except a narrow bar of white, formed by the tips of the lesser quills across the wings, and the scapulars, which are streaked

downwards with the same;* the cheeks and under parts are white: legs and toes yellowish; webs dusky.

These birds are inhabitants of Spitzbergen and Greenland, and are also met with at Newfoundland, where they are called Ice Birds; but they are rare visitants of the British Isles. That from which the above figure and description were taken, was caught alive on the Durham coast, and was, for a short time, fed with grain.

* Some specimens have a white spot below each eye.

OF THE GUILLEMOT.

THE bills of birds of this genus, though of a slender shape, are firm, strong, and pointed: the upper mandible slightly bending towards the end: base covered with soft short feathers: nostrils lodged in a hollow near the base: tongue slender, almost the length of the bill: thighs placed in the abdomen: no back toe.

The Guillemots appear to be a stupid race of birds: they do not, like many other kinds, become cautious from experience, but suffer themselves repeatedly to be shot at, as if they did not know danger, or care for life; for notwithstanding they have seen their associates drop at every fire, they still continue to wheel about in the same circle, and to alight again on the same place whence they were first disturbed.

These birds are numerously spread over various parts of the northern world, whence they are driven by the approach of winter to seek more temperate climes. At that season they arrive on the British shores, where they remain until they have reared their young.

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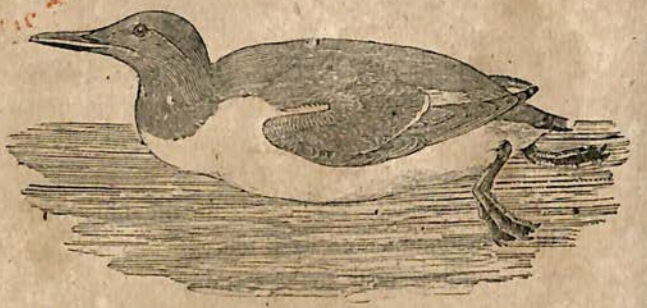


THE GUILLEMOT.

WILLOCK, FOOLISH GUILLEMOT, SKOUT, KIDDAW, SEA-HEN, LAVY, OR STRANY.

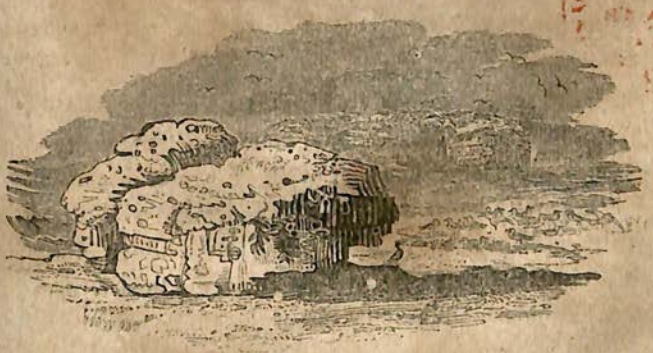
(*Colymbus Troile*, Lin.—*Le Guillemot*, Buff.)

THE Guillemot is a plump heavy bird in proportion to its size, weighing about twenty-four ounces, and measuring only seventeen inches in length, and twenty-seven and a half in breadth. The bill is a bluish black colour, about two inches and three quarters long, from the tip to the corners of the mouth, the inside of which is yellow: both mandibles are slightly notched near their points: irides hazel: from each eye to the hinder part of the head, a narrow line is formed by a singular division of the feathers, which here, as well as on the head and neck, are close and smooth, and of a dull dusty mouse-colour; the back, wings, and tail are nearly the same, but have a lead-coloured cast: the tips of the lesser quills, and the breast, belly, and vent, are white; legs dusky and brown: nails black.

The female lays only one egg, which is large in proportion to her size, being about three inches in length:

they are not all alike; those of one bird being of a whitish ground, and of another, perhaps, pale blue, or pale sea-green, and all of them are curiously and irregularly spotted and streaked with black.

It has been before observed, that these birds associate with and breed in the same places as the Razor-bill, and that they are, in many places, indiscriminately called Willocks.



THE LESSER GUILLEMOT,

OR MARROT.

Ringuia.

This species weighs about nineteen ounces, and measures in length sixteen inches, and in breadth twenty-six. The bill is shaped like that of the last, and is about two inches and a half long: the stroke formed by the divided feathers behind the eye, is dusky, on a white ground: the cheeks, fore part of the neck and the breast, tips of the secondary quills, and the whole of the under parts, are white, except a few dull spots on the auriculars, and some freckles on the breast: the front and crown of the head, back of the neck, and the whole of the upper parts, are dusky, inclining to lead colour: the legs and feet dusky, blushed with red.

Some naturalists suspect that the Lesser Guillemot is

only the young of the foregoing species; but this is not yet ascertained, neither is it known where they breed. They, however, seldom associate with the Guillemots that breed on the British shores, which they visit only during the winter season, and almost all of them retire northward in the spring.

The bird from which the above drawing and description were taken, was caught alive at Tynemouth, in the latter end of September, 1801: the tide had left it in a situation surrounded by rocks, upon the flat sand, from which it could not raise itself to take flight. While the drawing was making, it sat under a table trimming its feathers, and appeared perfectly at ease, and not the least alarmed at the peeping curiosity of the children who surrounded it. When this business was finished, it was taken and set down upon an open part of the shore, where it immediately began to waddle towards the water, with the whole leg and foot extended on the ground; and as soon as it reached its beloved element, it flapped its wings, darted through the surge, dived, and disappeared.

THE BLACK GUILLEMOT.

GREENLAND DOVE, SEA-TURTLE, OR TYSTE.

(*Colymbus Grylle*, Lin.—*Le petit Guillemot noir*, Buff.)

THE length of the Black Guillemot is about fourteen inches, breadth twenty-two, and its weight fourteen ounces. The bill is black, slender shaped, and pointed; the upper mandible slightly bent at the point: the inside of the mouth red. The whole plumage is sleek and glossy, and of a sooty-coloured black, excepting a large patch of white on the coverts of each wing: its feathers appear all unwebbed, and look like silky hair: the legs and feet are red: claws black. In some of this species the whole plumage is black; in others the lesser quills are tipped with white; and all those that remain in the northern climates are said to turn white in winter.

These birds are found in great numbers in the North Sea, in Greenland, Iceland, Spitzbergen, and the Ferro Isles, and when the winter sets in, they migrate southward along the shores of Scotland and England, where some of them remain and breed. The nest is made in the

deep crevices of the rocks which overhang the sea: the eggs are of a grey colour: some ornithologists assert that the female lays only one, others that she lays two. They commonly fly in pairs, and so low that they raise the surface of the sea by the flapping of their narrow wings.

The Greenlanders eat the flesh of this bird, and use its skin for cloathing, and the legs as a bait for their fishing lines. Ray, Albin, Willoughby, and Edwards have named it the Greenland Dove, or Sea Turtle. In the Orkney Islands it is called the Tyste.

The foregoing figure was taken from a drawing presented to the author.

THE SPOTTED GUILLEMOT.

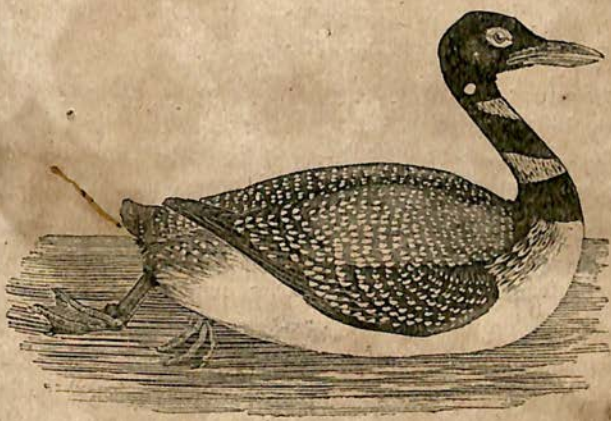
This is a variety of the last species, which the author has not seen. It is thus described by Latham:—"In this the plumage is in patches of white and black on the upper parts, and all beneath white. In Brunnich's bird the belly was spotted black and white: he supposed it to be a bird of the first year."

Latham enumerates several other varieties of this genus of birds, but as they have not been observed to visit the British Isles, they do not come within the scope of this work. There are, however, others which are occasionally met with in this country, but whether the differences may not be owing to age or sex, is not yet ascertained. One of these, presented in October, 1802, by the Rev. H. Cotes, of Bedlington, differed from the Lesser Guillemot in its bill's being much shorter, measuring only about an inch and a half on the ridge of the upper mandible, and in having the hind part of the head surrounded by a continuation of the white feathers which cover the cheeks, but mixed with dusky spots.

OF THE DIVERS.

The bills are strong, straight, and pointed: the upper mandibles the longest; the edges of each bending inwards: nostrils linear, the upper part divided by a small cutaneous appendage: tongue long, pointed, and serrated on each side near the base: thighs placed far backward: legs thin and flat, and extended horizontally: the toes, four in number; the exterior the longest; the back one small, and joined to the interior by a thin membrane: tail short, consisting of twenty feathers. These birds are broad, flat, and long-bodied, and swim in a squat position on the water. Ornithologists enumerate eight species of this genus, six of which, besides some doubtful varieties, frequent the British shores.

169



THE GREAT NORTHERN DIVER.

LOON, IMBRIM, OR EMBERGOOSE.

(Colymbus glacialis, Lin.—*L'Imbrim*, Buff.)

THE Great Diver weighs about sixteen pounds; measures three feet six inches in length, and four feet eight in breadth. The bill is black, four inches and a half long, and strongly formed: the head is of a deep black, glossed with green and purple reflections: the neck appears as if wrapped obliquely round with a bandage of the same colours as the head; the feathers in the spaces between are white, streaked down the middle with narrow black lines; the sides of the breast are marked in the same manner: the whole of the upper parts are black, spotted with white: the spots on the scapulars are the largest, and of an oblong square shape, placed in rows, two on the end of each feather: the under parts are white: quills and tail black. The female is less than the

male, and her whole upper plumage inclines more to brown. Her under parts are of a dirty white, and the bandages on her neck, and the spots on her body are not so distinct.

This species of the Diver seldom visits the British shores, except in very severe winters. In the summer season it inhabits the north of Europe, and the arctic coasts, as far as the river Ob in the Russian dominions, and Hudson's Bay in North America, and is common in the intermediate dreary countries in the same latitudes. They seldom quit the sea, or are seen inland, except at the breeding season, when, for the purposes of ovation and incubation, they repair to the fresh-water lakes in the Ferro Isles, Spitzbergen, Iceland, Greenland, &c. on the shores and small islets of which they make their nests and rear their young. The female is said to lay only two eggs, which are of a dirty white or stone colour: when she quits her nest, she flies very high, and on her return darts down upon it in an oblique direction.

The natives of some of the northern countries dress or tan the skins of these birds, as well as those of several other water-fowls, and make them into caps, pelices, and other warm garments.

The foregoing figure was taken from a stuffed specimen in the Wycliffe museum.

THE IMBER.

GREAT DOUCKER, OR EMBERGOOSE.

(*Colymbus Immer*, Lin,.—*Le Grand Plongeon*, Buff.)

THE Imber measures from the tip of the beak to the end of the tail nearly three feet, and from tip to tip of the wings three feet eight inches. The bill is four inches and a quarter long, and of a dark horn colour. The upper parts of the plumage are dark brown, each feather on the back and wings edged with light brownish ash: the front and crown of the head, and hinder part of the neck are slightly broken with spots of the same light brownish ash-colour: the cheeks and sides of the neck, to the breast, are speckled with brown; near to the lower part of the neck the brown colour spreads forward towards the front, which, as well as the throat, is white: the breast and belly are also of a glossy white: vent mottled with brown. The quills and tail are dusky, but the feathers on the latter are edged with dirty white: the legs are of a dark dingy lead colour. The plumage of the female is less distinct in its colours, being nearly of a dull brown on the upper parts, and dull white beneath.

This species is of nearly the same manners and habits as the last: they are both excellent divers and fishers, and are inhabitants of the same northern countries; but this is oftener met with farther southward, towards Scotland and its numerous adjacent isles. It is also spread more abroad in other countries, both in Europe, Asia, and America.* Latham describes it as being common

* A fine specimen was presented by Admiral Byron, when governor of Newfoundland, to Mr Tunstall.

in Switzerland, where it is known by the name of Fluder. He says, "it makes its nest among the reeds and flags, and places it in the water; so that it is continually wet, as in some of the Grebe genus. It utters a loud shrill cry." He adds that it is "sometimes taken twenty yards deep under water, viz. with a net or iron hook baited with a fish:" and Buffon also asserts, that "it dives to very great depths, and swims under water to the distance of an hundred paces without ascending to take breath: a portion of air included in its dilated wind-pipe supplies its respiration during this interval."

BRANCH OF THE ASIATIC SOCIETY

THE LESSER IMBER.

"BILL black and horn colour, tinged with blue, three inches long, pointed and slender: nostrils very near the base: tongue pointed: crown of the head, and back of the neck, mouse-colour: irides brown: scapulars, back, rump, tail, and wings, black, edged with grey: quill feathers black: tail very short and rounded. The whole under side of the body, from the throat to the tail, silvery white, except a brown bar which crosses the vent: inner coverts of the wings white: legs remarkably flat, and placed close to the tail; they are black and grey, with a blue tinge: the feet are very large, webs entire and flesh

colour. Length two feet one inch; extent of the wings three feet two inches: weight three pounds eight ounces. This bird was shot on Windermere Lake, in Westmoreland, in December, 1794."

This work is indebted for the above drawing and description, to Geo. Strickland, Esq. of Ripon, who further adds,—"As this species of the Colymbus much resembles the Imber in the colour of its plumage, I have given it the name of the *Lesser* Imber, as in weight and size it is one third less. I have not met with any description of it, and the specimen now in my possession is the only one I have seen."

THE FIRST SPECKLED DIVER.

SPRAT LOON, GREATEST-TAILED DIVER, OR SPECKLED LOON.

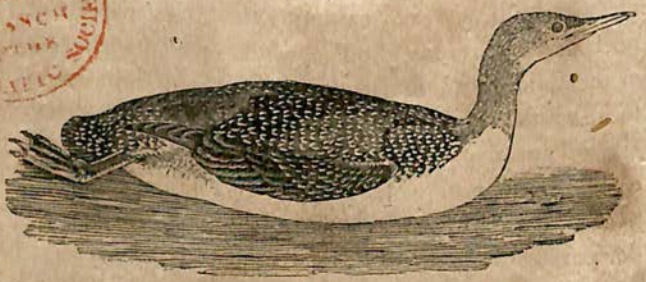
(*Colymbus stellatus*, Lin.—*Le petit Plongeon*, Buff.)

This species generally weighs about two pounds and a half, and somewhat exceeds two feet in length, and three and a half in breadth. The bill is three inches long, of

a light colour, and has rather a cast upwards: the crown of the head and the upper parts of the body are dusky, inclining to grey; and, excepting the hinder part of the neck, lesser coverts and quills, which are plain, the rest of the plumage is speckled all over with small white spots; those on the scapulars and middle wing coverts are the largest, and marked more distinctly on the margins of each feather, near to their tips. The fore part of the neck is of an ash colour: cheeks, chin, throat, and under parts, of a glossy white: tail tipped with white: legs and toes dusky; webs pale.

The natural habits of the Speckled Diver are much the same as those of the kinds before described, but it seems still more to shun the rigours of the north, and remains longer in the temperate climates. In the winter season it keeps its route southward, and is then met with in the Baltic, the German ocean, and on various parts of the British shores. In the spring it retires northward to the lakes of the continent, and the islands within the arctic circle, to breed and rear its young. The female makes her nest in the grass, near the edge of the water, and lays two eggs of a longish oval shape, larger than those of a Hen: they are of a dingy stone colour, spotted with black.

The foregoing figure was done from a stuffed specimen.

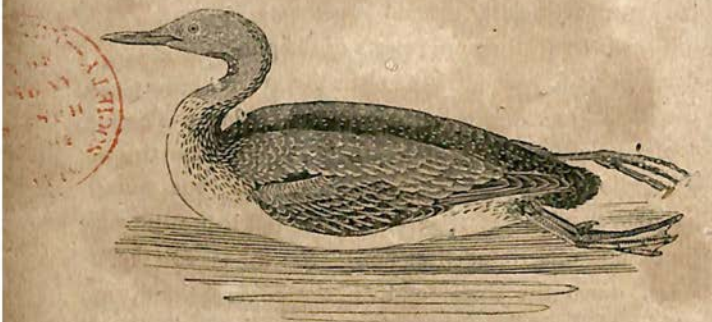


THE SECOND SPECKLED DIVER.

THE length of this bird, to the end of the tail, is two feet four inches, and rather more to the end of the longest or outside toe; the extended wings are three feet four inches, from tip to tip; and it weighs three pounds and a quarter. The bill, from the tip to the brow, is two inches and an eighth, and a little more than three inches to the corners of the mouth: both mandibles are white, faintly blushed with a livid or purple cast, except on the ridge of the upper one, where it is of a dark horn colour, fading off lighter towards the tip, which is entirely white: the irides are of a clear brown. The head and hinder part of the neck have a hoary dark ash-coloured appearance, at a little distance, but on a nearer view, the feathers on the crown and brow, which are very small, are dark in the middle, and distinctly edged with light grey: those from the nape downwards are larger, but the edges are less defined. The sides of the mouth, about the eyes, also the cheeks and throat, are white, but are partially dulled or freckled by a mixture of numerous small brownish ash-coloured spots: the fore part of the neck is

darkened with closer set and larger spots, inclining more to brown. All the upper parts of the plumage are of a deep or black brown, and except the greater coverts and the quills, are speckled all over with oblong oval white spots, placed on the side of each feather, near the tip. The whole under side of the body is white, but crossed by a brown bar at the vent. The tail is brown, very short, and of a rounded or fan-shape: the legs on the insides, down the shins, and on the edges behind, are white: the middle of the webs, the two inner toes, and the terminating joint of the outer one, together with all the nails, are the same: all the other parts of the legs and feet are dusky.

A pair of these birds were shot on the Tyne, at Newcastle, in the month of January, by Mr Pollock. They differed somewhat from the preceding species, but very little, excepting in weight, from each other. This figure and description were taken from the larger bird. The smaller, which probably was the female, weighed only two pounds and a half. Although a particular chapter has been allotted to these birds, the author does not suppose them to be a distinct species from the preceding, which was probably a very old female.



THE RED-THROATED DIVER.

RED-THROATED LOON, OR RAIN GOOSE.

(*Colymbus septentrionalis*, Lin.—*Le Plongeon à gorge rouge*, Buff.)

This bird measures three feet five inches in breadth, two feet to the end of the tail, and four inches more to the end of the toes, and weighs nearly three pounds. The bill is dark coloured, and less than that of the Speckled Diver: the irides reddish: the head, chin, and sides of the neck are of a spotless or plain dusty lead-coloured blue: the upper fore part of the neck, to the throat, is of a deep red bay: the hinder part of the neck from the nape towards the shoulders and sides of the breast, is streaked downwards with dusky and white, and formed into curious ridges, by the white edges and tips of the feathers standing outwards. The upper parts of the plumage in some specimens are of a greyish dusky colour, in others of a shining deep brown, and in both thinly sprinkled all over with white spots, which on the coverts and scapulars assume a more streaked or lengthened form: the under parts are white: the legs the same as those of the preceding species. The male and female are nearly alike in their plumage.

This species inhabits the same cold countries as the other Divers, and its manners and habits do not differ from theirs; but it is of a more lively character, and has a more sprightly appearance than any of the preceding kinds; also, like the rest of the genus, it is driven, in severe winters, from the northern to more southern climes. They breed, and are common in Greenland, Hudson's Bay, Iceland, the Shetland and Orkney Isles, &c. The female makes her nest, which is composed of moss and herbage, lined with a little of her own down, on the very edge of the shore: she lays two eggs, which are nearly of the size of those of a hen, but of a longer shape, and of a dingy bluish white, thinly marked with dusky spots. They live in pairs with inconceivable affection, run swiftly upon the water, dive immediately, but are very awkward upon the land, from which they rise with great difficulty. Their flight, however, when once on the wing, is both strong and swift: they rise to a great height, making at intervals a disagreeable croaking, or a loud howling cry.

THE BLACK-THROATED DIVER.

(*Colymbus Arcticus*, Lin.—*Le Lumme, ou petit Plongeon de la Mer du Nord*, Buff.)

This bird is somewhat bigger than the Red-throated Diver, and differs from it in its plumage; but in every other respect they are very much alike. The fore parts of the head, the throat, and front of the neck, are black, changing in different lights to glossy purple or green: on the sides of the neck this long black patch is bordered by a stripe of black and white oblong spots, pointing downwards, and falling over each side of the breast. The hinder part of the head and neck are ash-coloured;

upper parts of the plumage black, marked on the scapulars with square white spots, and on the wing coverts with smaller round ones: the under parts are white: quills dusky: tail black: legs dark, and reddish on the inside.

The Black-throated Diver, like the preceding, is common in all the Arctic regions, and but rarely visits England. It has the same disagreeable cries, which, in both kinds, are believed by the natives of Norway, the Orkney Isles, &c. to forebode heavy rains or bad weather. Their skins are dressed, and made into caps, hoods, &c. and are much esteemed as a covering for the head and breast, in the rigorous climates in which these birds are found, the great thickness of the feathers rendering them very fit for that purpose.

By many naturalists it is thought that this differs from the former bird in sex only.*

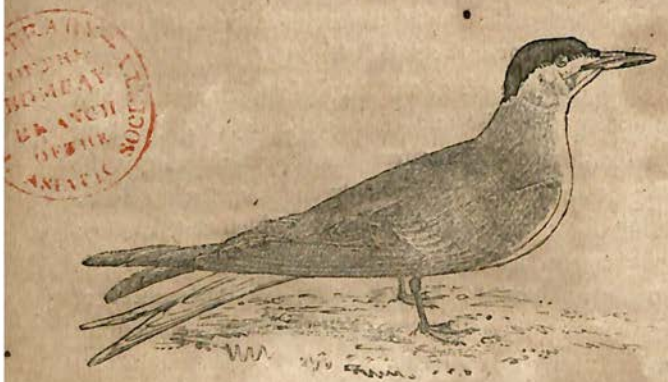
* A bird supposed to be of this species, was caught in the month of March, in a pool near Dukesfield, Northumberland, and presented to the author, by Mr Thomas Crawhall: it wanted the black patch on the throat; its tail, like the First Grey Speckled Diver's, was tipped with white, and its legs were marked like those of the second. It measured two feet two inches from the bill to the tail.

OF THE TERNS, OR SEA SWALLOWS.

Birds of this genus have straight, slender-shaped, and pointed bills: nostrils linear: tongue slender and sharp: their legs are small, the webs deeply scalloped from the toe ends to the middle, and the back toe small: the wings are very long, and the tail forked.* These birds continue long on the wing, and, in their quick and circling evolutions, they rise and sink in the air, or glide along near the surface of the waters, sometimes snapping at the insects in their way, or, suddenly checking their course, darting down upon their finny prey, which they swallow in the ascent, without delaying their progress. Their common residence is the sea-shores, or the mouths of large rivers, whose courses, however, they sometimes traverse nearly to their rise. They also visit loughs and lakes very distant from the ocean, and likewise make excursions a long way out to sea. They congregate in large flocks, but particularly in the breeding season, when they are more than usually restless, wheeling and redoubling their varied flight high in the air, and uttering their loud screams in clamorous confusion. Some of the species are described as breeding on the shores, and depositing their two eggs upon the bare rock; others lay three or four eggs in a hole made in the dry sand; and some kinds nestle among the reeds and rushes in the marshy borders of the lakes which they frequent. The young ones keep the nest a good while after they have been hatched, not offering to leave it until their wings have attained sufficient length and strength to enable them to fly with ease and safety.

* In the young of some species, the tails are nearly even at the ends.

One kind or another of these birds is met with by navigators in almost every part of the world. Latham enumerates twenty-three species, besides varieties: five of the former and one of the latter are British.



THE COMMON TERN.

GREAT TERN, KIRMEW, OR SEA-SWALLOW.

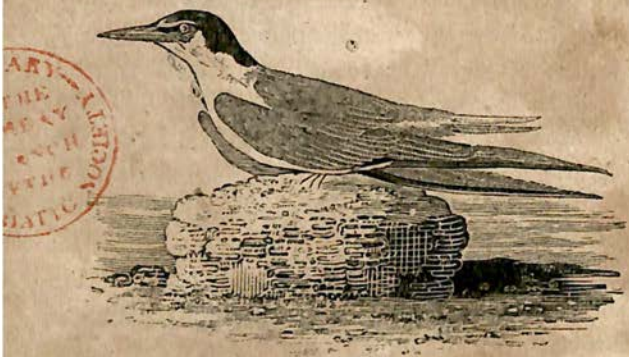
(*Sterna Hirundo*, Lin.—*La grande Hirondelle de Mer*, Buff.)

This bird measures above fourteen inches in length, thirty in breadth, and weighs more than four ounces. The bill is of a crimson colour, tipped with black, and about two inches and a quarter in length: the head is capped with a longish black patch, which extends over the eyes, and ends in a point below the nape of the neck: the throat, cheeks, neck, and the whole of the under parts are white: the tail, which is long, and greatly forked, is also white, except the two outside feathers, which are black on their exterior webs; but in flying

these forks are frequently closed so as to look like a single feather. The upper part of the plumage is of a fine pale lead colour: the quills are of a deeper cast; the outside ones the darkest: the legs and feet red.

The female, it is said, forms her nest in the moss or long coarse grass, near the lake, and lays three or four eggs of a dull olive colour, marked with different sized black spots at the thicker end: it is added, that she covers them only during the night, or in the day when it rains; at all other times she leaves the hatching of them to the heat of the sun.

This clean-looking bird is pretty common in the summer months on the sea-coasts, rivers, and lakes of the British Isles, and is also met with in various parts of Europe, Asia, and America. It migrates southward to the Mediterranean, and to the Madeira and Canary Isles, and northward as far as Spitzbergen and Greenland.



THE LESSER TERN,

OR, LESSER SEA-SWALLOW.

(*Sterna minuta*, Lin.—*La petite Hirondelle de Mer*, Buff.)

THE Lesser Tern measures about eight inches in length, and nineteen in breadth, and weighs a little more than two ounces. It looks like the former species in miniature; is equally, if not more delicately elegant in its plumage and general appearance, and its manners and habits are much the same; but it is not nearly so numerous, or so widely dispersed. It differs from the Common Tern in having the black patch on its head divided by a white line on the front of its brow, and over each eye, in the tail being wholly white, and, in proportion to the size of the bird, much shorter or less forked, and in the bill and the feet being more inclined to orange or yellow. Nothing can exceed the clean, clear, and glossy whiteness of its close-set feathers on the under parts of the body; but the upper plumage is of a plain *sober* lead-coloured grey. The egg is an inch and a half in length, of a dirty yellowish brown, dashed all over with reddish blotches.

This bird is met with in the summer months about the Baltic, in some parts of Russia, the river Irtish in Siberia, the Black and Caspian Seas, and in America near New York, &c. In Belon's time "the fishermen floated a cross of wood, in the middle of which was fastened a small fish for a bait, with limed twigs stuck to the four corners, on which the bird darting, was entangled by the wings."

THE BLACK TERN.

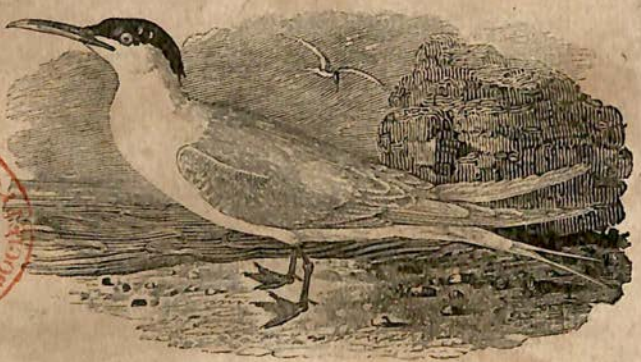
SCARE-CROW, CLOVEN-FOOTED GULL, OR CAR-SWALLOW.

(*Sterna fissipedes*, Lin.—*L'Epouvantail*, Buff.)

This bird measures about ten inches in length, and twenty-four in breadth, and weighs about two ounces and a half. The bill, head, neck, breast, and belly, are a dull black: back, wings, and tail, a deep ash colour: vent, and the exterior feather on each side of its sharp forked tail, white; and in the male there is a white spot on the throat. The legs and feet are a dusky red, the webs much depressed in the middle.

The Black Tern is of a size between that of the last two. Like them it frequents the sea-shores in summer; but its habits and manners are somewhat different: it has a shriller cry, does not associate with them, and seems rather to prefer the rivers, fens, marshes, and lakes inland, to the sea. It breeds and rears its young among the reeds and rushes in the former places, and is said to lay three or four eggs of a dirty greenish colour, spotted and encircled about the middle with black. It feeds on beetles, maggots, and other insects, as well as on small fishes; and, like the rest of the genus, is very noisy,

clamorous, and restless. Voyagers and ornithologists say it is met with in Hudson's Bay, Newfoundland, and Iceland, and that it is common in Siberia, and the salt lakes in the deserts of Tartary.



THE SANDWICH TERN.

(Sandvicencis, Latham.*)*

A PAIR of these birds, male and female, were shot on the Fern Islands, on the coast of Northumberland, in July, 1802, from the former of which this figure was taken.* They measured two feet nine inches from tip to tip of the wings: the bills were tipped with yellow: the black feathers which capped and adorned their heads were elongated behind, forming a kind of peaked crest, which overhung the nape and hinder part of the neck:

* These birds, as well as specimens of nearly the whole of the different kinds which breed on the Fern Isles, were, after great trouble and risk, shot there, expressly for the use of this work, by Major Shore and Lieutenant Henry Forster Thomson, of the 4th dragoons: and the author takes this opportunity of expressing the high sense of gratitude he feels to those gentlemen, for the facilities they have given to his labours.

the feathers of the fore part of the neck and breast, when ruffled up, appeared delicately and faintly blushed with red. In other respects they corresponded so nearly with Mr Latham's accurate description, that to attempt giving any other is needless.—" Length eighteen inches: bill two inches; colour black, with the tip horn colour: tongue half the length of the bill: irides hazel: forehead, crown, hind head, and sides above the eyes, black: the rest of the head, neck, under parts of the body and tail white; the back and wings pale hoary lead colour: the first five quills hoary black, the inner webs deeply margined with white; the sixth like the others, but much paler: the rest of the quills like the back: the tail is forked, the outer feathers six inches and a quarter in length; the wings reach beyond it: legs and claws black: the under part of the feet dusky red." " Some specimens have the top of the head dotted with white." " In young birds the upper parts are much clouded with brown; and the whole of the top of the head greatly mixed with white: but this is not peculiar, as the young of other Terns with black heads are in the same state." " It is pretty common on the Suffolk and Kentish coasts in the summer months, breeds there in the month of June, is supposed to lay its eggs upon the rocks, and to hatch them about the middle of July." He adds, " Whether these birds only visit us at uncertain seasons, or have hitherto passed unnoticed among other Terns, we know not; but believe that this has not yet been recorded as a British species." " They generally make their appearance in the neighbourhood of Romney in Kent, about the middle of April, and take their departure in the beginning of September."

(*Sterna nævia*, Lin.—*La Guifette*, Buff.)

Latham says this bird is in "length eleven inches and a half. Bill dusky: back part of the head and nape black, edged with rufous brown: the eye half surrounded at the back part with a black crescent: the rest of the head, neck, and under parts, white: back and wings of a bluish brown, the margins of the feathers paler: the outward part of the wing more inclined to blue grey: the wings exceed the tail in length; the last very little forked: legs dusky brown." He adds, "This by authors has been considered as a species, but is, no doubt, a young bird merely of the Sandwich Tern."

Buffon gives a figure, and describes this bird as common on the coast of Picardy, and frequently seen flying on the rivers Seine and Loire: that it is of a middle size between the Greater and Lesser Tern, but differs from them in some particulars in its habits and œconomy, viz.: that it feeds more upon insects, flies, &c., is not so clamorous as the Greater Tern, does not lay its eggs on the naked sand, but makes its nest in the marshes with a few dried herbs, in a tuft of grass or moss, in some insulated hillock, and that it sits upon its eggs closely (generally three in number) till the young are hatched.

THE BROWN TERN.

(*Sterna nigra*, Lin.—*Sterna Fusca*, Ray.—*Brown Tern*, Willoughby.—*Brown Gull*, Pennant.)

"THE whole under side white; the upper brown; the wings partly brown, partly ash-colour: the head black: the tail not forked. These birds fly in companies."

This short and imperfect account is all that ornithologists have been enabled to give of this doubtful species, which has found its way into notice merely from the communication of Mr Johnson* to Mr Ray, copied by the latter into his Synopsis of Birds, &c.

* Mr R. Johnson, the correspondent, friend, and assistant of the immortal Ray, was vicar of Brignal in Yorkshire. He died there on the 7th of May, 1695, aged 66 years.

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OF THE GULL.

THE bill is strong and straight, but bent downwards at the point: the nostrils are pervious, oblong, and narrow, and are placed in the middle; the lower mandible has an angular prominence on the under side, which tapers towards, and forms its tip: the tongue is a little cloven. The body is cloathed with a great quantity of down and feathers, which, together with the large head and long wings, give these birds an appearance of bulk, without a proportionate weight. Their legs are small, naked above the knees: feet webbed, and the back toe detached, and very small.

This genus, which some naturalists have described as consisting of about nineteen species, besides a few varieties, is numerously dispersed over every quarter of the known world, and is met with, at certain seasons, in some parts, in such multitudes, that the whole surface of the ground is covered with their dung: and their eggs are gathered by the inhabitants in prodigious quantities. They assemble together in a kind of straggling mixed flocks, consisting of various kinds, and greatly enliven the beach by their irregular movements, whilst their shrill cries are deadened by the noise of the waves, or nearly drowned in the roarings of the surge. They occasionally take a wide range over the ocean, and are met with by navigators many leagues distant from the land. Their plumage, which in each individual of the species varies with its age,* is clean and agreeable, but their

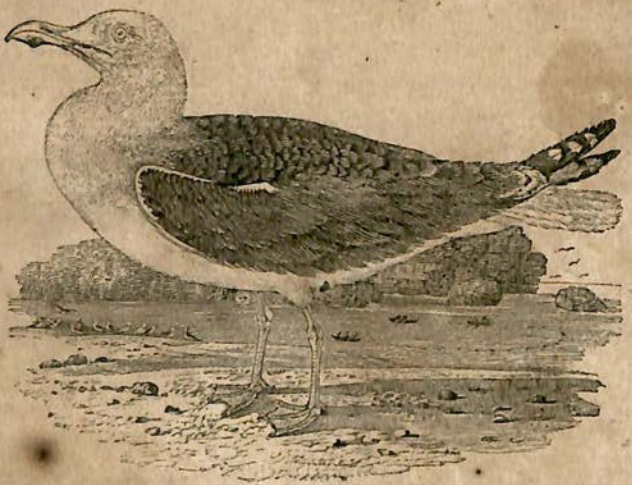
* Hence the confusion which has arisen among authors and nomenclators, respecting this numerous tribe of birds.

carriage and gait are ungraceful, and their character is stigmatised as cowardly, cruel, lazy, thievish, and voracious; for which reason they have by some been called the Vulture of the sea: and it is certain [though this trait is not peculiar to them] that the stronger will rob the weaker kinds, and that they are all greedy and gluttonous, almost indiscriminately devouring whatever comes in their way, whether of fresh or putrid substances, until they are obliged to disgorge their overloaded stomachs. On the contrary, they are able to endure hunger a long while: Buffon mentions one that lived nine days without tasting food.

Some ornithologists divide this genus of birds into two kinds, calling the larger Gulls, and the lesser Mews, and class with the former kind those which measure eighteen or twenty inches from the point of the bill to the end of the tail; and with the latter all those which are of less dimensions. The larger kinds are not so common in the warm, as they are in the cold climates, where they remain to breed and rear their young, feeding chiefly upon the rotting carcases of dead whales, &c. which they find floating on the sea, among the ice, or driven on shore by the winds and waves; and many are said to remain in the dreary regions of ice and snow during the winter, the extreme severity of which does not compel them all to quit their native climes.

In the temperate and cultivated countries they occasionally leave the shores, and make excursions inland, tempted probably to search for a change of food, such as worms, slugs, &c. and of these they find, for a time, an abundant supply on the downs and pastures which they visit. The jelly-like substance which is sometimes met

with in the fields, and known by the name of *star-shot*, is believed to be the remains of half-digested worms, &c. which they have discharged from their over-loaded stomachs.



THE BLACK-BACKED GULL,

OR, GREAT BLACK AND WHITE GULL.

(*Larus marinus*, Lin.—*Le Goiland noir*, Buff.)

This species, which is the largest of the tribe, measures twenty-nine inches in length, and five feet nine inches in breadth, and weighs nearly five pounds. The bill is pale yellow, very firm, strong, and thick, and nearly four inches long from the tip to the corners of the mouth: the projecting angle on the lower mandible is red, or orange, with a black spot in the middle, on each side: the irides are yellow, and the edges of the eye-lids orange. The upper part of the back and wings is black: all the other

parts of its plumage, and the tips of the quills are white: the legs pale flesh colour.

Gulls of this species are common in the northern parts of Europe, the rocky isles of the North Sea, and in Greenland, but are only thinly scattered on the coasts of England, where they, however, sometimes remain to breed on the highest cliffs which overhang the sea: their eggs are of a round shape, of a dark olive colour, thinly marked with dusky spots, and quite black at the thicker end. Their cry of *kac, kac, kac*, quickly repeated, is roughly hoarse and disagreeable.

Mr Pennant says, "I have seen on the coast of Anglesea a bird that agrees in all respects with this, except in size, in wanting the black spot on the bill, and in the colour of the legs, which in this are of a bright yellow: the extent of the wings is only four feet five: the length only twenty-two inches: the weight one pound and a half. This species, or perhaps variety, (for I dare not assert which) rambles far from the sea, and has been shot at Bullstrode, in Middlesex." One of this sort was shot by Mr Latham on the Thames, near Dartford, and measured full two feet in length.

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THE HERRING GULL.

(*Larus fuscus*, Lin.—*Le Goiland in manteau gris-brun, ou le Bourgmestre*, Buff.)

THE weight of this bird exceeds thirty ounces; the length is about twenty-three inches, and the breadth fifty-two. The spot on the angular nob of the under mandible is deep orange; the rest of the bill yellow: irides pale yellow; edges of the eye-lids red. The back and wing coverts are of a dark bluish ash colour: the first five quills in most specimens are black on the upper parts, and have each a roundish white spot on the outer webs near the tips; others are marked differently on the quills: legs pale flesh colour. The back and wings of some of this species, which are supposed to be the young not arrived at full plumage, are ash-coloured, spotted with brown: the old ones are said to turn quite white.

The haunts, manners, and habits, as well as the general appearance of this Gull, are very similar to those of the preceding species, but this is much more common on the British shores: they make their nests of dry grass on the projecting ledges of the rocks, and lay three eggs of a dull whitish colour, spotted with black. They have obtained their name from pursuing the shoals of herrings, and preying upon those fish. Fishermen describe them as the constant, bold, intruding attendants on their nets, from which they find it difficult to drive them away. This species, like the preceding, is met with in the cold northern seas, but has been observed to wander farther into southern climates.

Naturalists are divided in their opinions respecting the Black-backed Gull, the Herring Gull, and the Wâgel:

it is by some suspected that they are all of one species, and that the difference in their appearance is owing merely to their age and sex. This, as well as much more respecting the Gull tribe, remains to be determined by further investigation. The Glaucous Gull of Pennant and Latham, which they do not consider as a British bird, called by the Dutch *Burgermeister*, or *Burgomaster*, and figured in the *Planches Enluminees* under the name *Goiland cendrée*, is also one of the number involved in the same doubt, and is probably not a species distinct from the Herring Gull; and Latham has the same doubt respecting the Silvery Gull.

THE WAGEL.

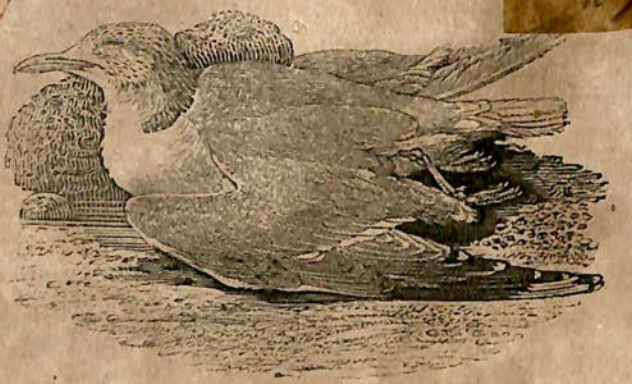
GREAT GREY GULL, GRISARD, OR BURGO-MASTER.

(*Larus nævius*, Lin.—*Le Goiland varié, ou le Grisard*, Buff.)

This Gull is about two feet in length, and five in breadth, and weighs nearly three pounds; but the individuals vary much in their size, some of them being less, and others larger than these dimensions. The bill is black, scarcely three inches long: the irides dark blue. The whole plumage is a mixture of ash-coloured brown and white. The feathers on the back are dark in the middle, with whitish grey edges: the wing coverts nearly the same, but more spotted; and the under parts of the body have a much lighter and more mixed appearance: the quills are plain black: the middle tail feathers

the same, but tipped with white, and crossed with a narrow white bar towards the root or base: the side feathers are mottled black and white: the legs are of a dirty white, sometimes blushed with red.

Mr Pennant treated of the Wagel as a distinct species, from an opinion he had formed, "that the first colours of the irides, of the quill feathers, and of the tail, are in all birds permanent." Further observation, however, caused him to alter his mind. Other observers say that this Gull is the young of the Herring Gull, and that it does not change its grey plumage until the fourth year.



THE COMMON GULL.

COMMON SEA-MALL, OR MEW.

(*Larus Canus*, Lin.—*La Grande Mouette cendrée*, Buff.)

THE Common Gull generally measures between sixteen and seventeen inches in length, thirty-six, and sometimes more, in breadth, and weighs about one pound. The bill is pale yellow, tinged with green,* and an inch and three-quarters long: irides hazel: edges of the eyelids red: the upper part of the head and cheeks, and the hinder part and sides of the neck are streaked with dusky spots: the back, scapulars, and wings are of a fine pale bluish grey: the throat, rump, tail, and all the under parts are pure white: the first two quills are black, with a pretty large white spot near the tips; the next four are tipped with black, and the secondaries largely with white:

* Buffon says, the bluish bill and feet, always observable in this species, ought to distinguish it from every other, in which the feet are generally of a flesh colour, more or less vermillion or livid.

the legs are greenish, or a dirty white. This is nearly the description of an individual specimen; but from the number which the author has examined, it is certain that these birds vary in the markings of the head, quills, tail, and in the colour of the bills and feet, hardly two of them being found exactly alike. Some have the head quite white; some the quills plain black at the ends; others the tail tipped with black, and the feet blushed with red, green, or blue. Their plumage and look altogether is very clean and agreeable.

The habits and manners of this species are much the same as those of the rest of the genus: they are spread all over the globe, and are the most common and numerous of all the Gulls which frequent the British shores. They breed on the rocky cliffs; and lay two eggs, nearly of the size of those of a Hen, of an olive brown colour, marked with dark reddish blotches, or irregular spots. At the mouths of the larger rivers, they are seen in numbers, picking up the animal substances which are cast on shore, or come floating down with the ebbing tide: for this kind of food they watch with a quick eye, and it is curious to observe how such as are near the breakers will mount upon the surface of the water, and run splashing towards the summit of the wave to catch the object of their pursuit. This species also, at particular seasons, resorts to the inland parts of the country to feed upon worms, &c.

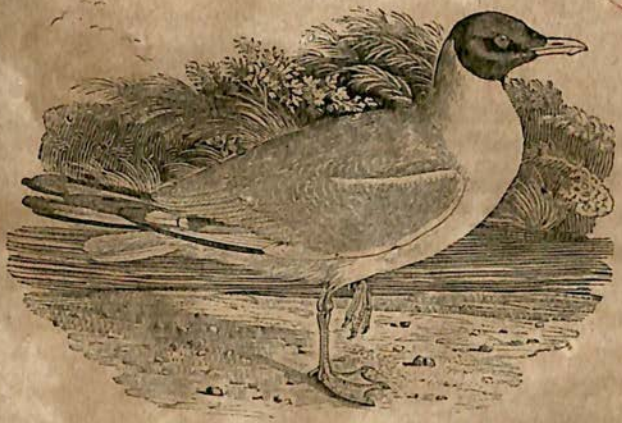
Some persons who live near the sea commonly eat this, as well as various other kinds of Gulls, which they describe as being good food, when they have undergone a certain sweetening process before cooking, such as burying them in fresh mould for a day, or washing them in vinegar.

THE WINTER GULL.

WINTER MEW, OR CODDY MODDY.

(*Larus hybernus*, Lin.—*La Mouette d'hyver*, Buff.)

THIS generally exceeds the Common Gull in its weight and admeasurement. The bill is lightish, except at the tip, of a slender shape, and about two inches long: irides hazel. It is marked with oblong dusky spots on the top of the head and hinder part of the neck: back and scapulars pale ash-coloured grey; but these feathers are spotted with brown: wing coverts pale brown, edged with dingy white; the first quill is black, the six following more or less black at the ends; the others tipped with white: the tail is crossed with a broad black bar near the end: all the other parts of the plumage are white: legs bluish dirty white. Mr Pennant asserts that this is only a young bird, not a species distinct from the Common Gull; and he also differs from Linnæus in his opinion that it is the same as the *Larus tridactylus*, or *Tarrock*.



THE BLACK-HEADED GULL.

BLACK-CAP, OR PEWIT GULL.

(*Larus ridibundus*, Lin.—*La Mouette rieuse a Pattos rouges*, Brisson.—*La Mouette rieuse*, Buff.)

THIS pretty looking bird measures fifteen inches in length, and thirty-six in breadth, and weighs about ten ounces. The bill is of rather a slender make, and of a full red colour: the irides hazel: edges of the eye-lids red: head black; but in some specimens it inclines to a mouse-coloured brown. The back and wings are of a delicate pale lead, or ash colour; the neck, tail, and all the under parts, pure white. The first quills in the specimen from which the above drawing was made, were black on the outer webs; those next them white, and black towards their tips: others of the quills were partly ash-coloured, and partly white: the legs red.

The Black-cap Gulls breed on the marshy edges of rivers, lakes, and fens, in the interior parts of the country.

The female makes her nest among the reeds and rushes, of heath or dried grass, and lays three or four eggs of an olive brown colour, blotched over with spots and streaks of dull rusty red. As soon as the young are able to accompany them, they all retire from those places, and return to the sea.

In former times these birds were looked upon as valuable property, by the owners of some of the fens and marshes in this kingdom, who, every autumn, caused the little islets or *hafts*, in those wastes, to be cleared of the reeds and rushes, in order properly to prepare the spots for the reception of the old birds in the spring, to which places at that season they regularly returned in great flocks to breed. The young ones were then highly esteemed as excellent eating, and on that account were caught in great numbers before they were able to fly. Six or seven men, equipped for this business, waded through the pools, and with long staves drove them to the land, against nets placed upon the shores of these hafts, where they were easily caught by the hand, and put into pens ready prepared for their reception. The gentry assembled from all parts to see the sport. Dr Plot,* in

* Dr Plot describes them as coming annually "to certain pools in the estate of the right worshipful Sir Charles Skrymsher, Knight, to build and breed, and to no other estate but that of this family, in or near the county, to which they have belonged *ultra hominum memoriam*, and never moved from it, though they have changed their station often." What the Doctor relates of the attachment of these birds to the head of that family, of their removal to another spot immediately on his death, and of their returning again with the same predilection to his heir, is curious enough, although bordering very much upon the marvellous. Willoughby gives nearly the same account, in his excellent Ornithology, published in 1678, and computes the sale of the birds to amount to twenty-five pounds per annum.

his Natural History of Staffordshire, published in 1686, gives the above particulars, and says that in this manner as many have been caught in one morning as, when sold at five shillings per dozen, (the usual price at that time) produced the sum of twelve pounds ten shillings; and that in the several drifts on the few succeeding days of this sport, they have been taken in some years in such abundance, that their value, according to the above rate, was from thirty to sixty pounds,—a great sum in those days. These were the *See-Gulles* of which we read as being so plentifully provided at the great feasts of the ancient nobility and bishops of this realm. Although the flesh of these birds is not now esteemed a dainty, and they are seldom sought after as an article of food, yet in the breeding season, where accommodation and protection are afforded them, they still regularly resort to the same old haunts, which have been occupied by their kind for a long time past.* The foregoing figure and description were taken from a specimen shot on Prestwick-Car, near Newcastle upon Tyne.

The *Larus Atricilla* of Linnæus (Laughing Gull of Catesby, &c.) is by some naturalists believed to be an old bird of this species, differing from it only in being rather larger, and in having the legs black.

* This is the case with the flocks which now breed at Pallinsburne, in Northumberland, where they are accounted of great use in clearing the surrounding lands of noxious insects, worms, slugs, &c.

THE BROWN-HEADED GULL.

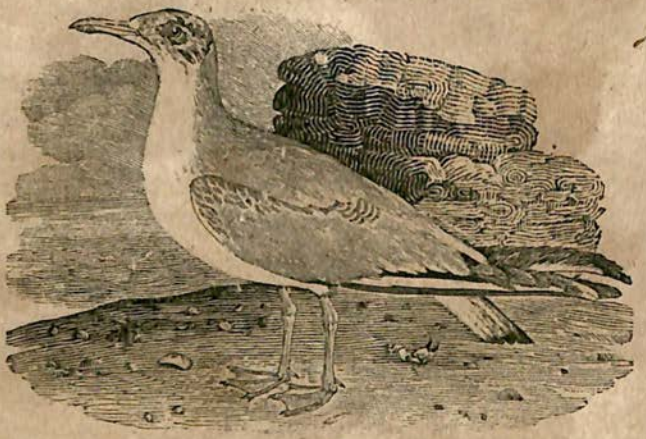
RED-LEGGED GULL, OR PICKMIRE.

Four of these birds, two males and two females, were shot out of a flock on Prestwick-Car, Northumberland, in the middle of May, by Mr John Wingate, of Newcastle, who favoured the author with a pair: they were of the same kind as the one described by Dr Heysham in his Catalogue of Cumberland Animals, and communicated by him to Mr Latham. The bill and feet red; the edges of the eye-lids the same: inside of the mouth reddish orange: irides hazel. The female, which was rather less than the male, weighed about seven ounces, and measured fourteen inches in length, and thirty-five in breadth: her head and throat were mouse-coloured brown, the feathers, in places, very slightly edged or fringed with white. The plumage on the head of the male was of the same colour, but much more dappled and broken with white. In both, the neck, throat, and belly were white; back and scapulars of a fine pale blue grey colour; middle coverts of the wings light brown, edged with greyish white; the exterior webs, and part of the interior ones of the first four quills were black: tail white, tipped with black: toes short.

Dr Heysham says, "It is clear," from his description, "that it neither agrees with the Tarrock nor the Pewit, and it could not be a young bird, as it was killed in June, and the ovary contained eggs." This reasoning does not appear decisive; the bird might be old enough to breed, although not in perfect plumage, to which some species do not attain in less than two or three years: therefore, whether it really was the young of the Black-headed

Gull, or a distinct species, remains to be determined by further investigation.

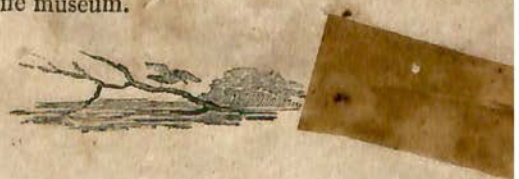
The male of the Brown-headed Gull is by some ornithologists called the Kittiwake (the *Larus Rissa* of Linnæus); but as there is no end of the conjectures, opinions, and doubts respecting many of the Gulls, which, from the slightest differences of plumage, have, in some instances, been branched out into new varieties, in this work the descriptions of others have been given in preference to making alterations, when the author could not with certainty throw any new light upon the subject.

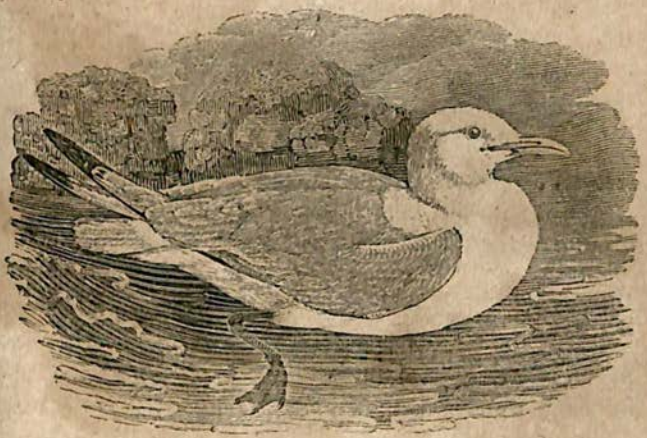


La petite Mouette grise, Brisson.

Mr Pennant describes this as a variety of the Black-headed or Pewit Gull. He says, "It differed in having the edges of the eye-lids covered with white soft feathers. The fore part of the head white; the space round the eyes dusky: from the corner of each eye is a broad dusky bar, surrounding the hind part of the head; behind that is another reaching from ear to ear: the ends, interior and exterior edges of the three first quill feathers, black; the ends and interior sides only of the two next white; beneath a black bar: the rest, as well as the secondaries, ash colour." "In all other respects it resembled the Common Pewit Gull." "The fat was of a deep orange colour."

The above figure was taken from a stuffed specimen in the Wycliffe museum.





THE KITTIWAKE,

OR, ANNETT.

(Larus Rissa, Linnæus.*)*

The Kittiwake measures from fourteen to seventeen inches in length, thirty-eight to forty in breadth, and weighs generally about fourteen ounces. The bill is of a greenish yellow: the inside of the mouth and edges of the eye-lids are orange: irides dark: the head, neck, under parts and tail, pure white: back and wings a lead or ash-coloured grey: the exterior edge of the first quill feather, and the tips of the next four or five are black: legs dusky: hinder toe not bigger than a small wart. Some specimens of the Kittiwake are described as having the auriculars tipped with black.

These birds chiefly haunt the rocky promontories and islets on the British coasts: they are likewise widely dispersed over the world, particularly in the north, and are

met with from Newfoundland to Kamtschatka, as well as as in all the intermediate parts, and as far north as navigators have visited.

This specimen was shot on one of the Fern Islands in July, 1802.

THE TARROCK.

(*Larus tridactylus*, Lin.—*La Mouette cendrée tachetée*, Buff.)

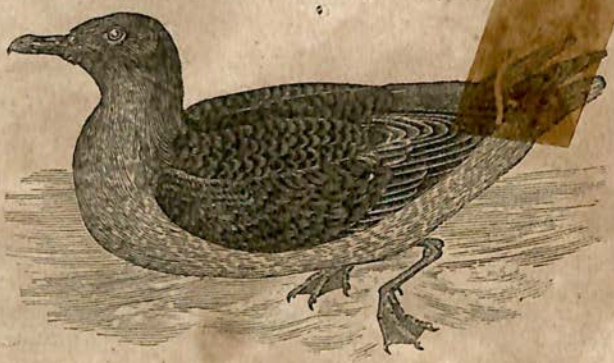
This bird is somewhat less than the Kittiwake. The bill is black, short, and strong: the head, neck, breast, belly, and tail are white, with the exception of the tips of ten of the middle feathers of the tail, a spot on the auriculars, another under the throat, and a crescent-shaped patch on the hinder part of the neck, all of which are black: the back and scapulars are of a bluish grey: lesser coverts of the wings deepish brown, edged with grey: some of the greater covert feathers are of the same colour, and others of plain grey: the outer webs and ends of the first four quills, and the tips of the next two, are black; all the rest are wholly white: the legs are of a dingy ash colour: the hinder toe, like that of the Kittiwake, is only a kind of small, and apparently useless, protuberance.

The habits and manners of these birds are the same as those of the Kittiwake: they are met with in the same countries, and at the same breeding places, from Greenland to Scotland and its isles. They leave the sea-shores in autumn, and spread themselves over the northern ocean, making, it is said, the floating isles of ice their chief resting places. In the spring they return to the rocky crags to breed; and in the month of June the female lays two eggs of a dingy greenish colour, spotted with brown.

these as well as the flesh of the birds, are held in great estimation by the Greenlanders, who also use their skins for caps and garments.

After many doubts and surmises respecting the Tarrock, the prevailing opinion among ornithologists is, that it is only the Kittiwake not arrived at full age and plumage.

A specimen of this bird, presented by Charles John Brandling, Esq. of Gosforth, had not the black spot on the throat. The lesser wing coverts were very dark brown; the first five quills were black on the outer webs and tips; the tips of the next two were marked with a black spot; and the two outside feathers of the tail were tipped in the same way.



THE SKUA GULL,

OR BROWN GULL.

(Larus catarractes, Lin.—*Le Goiland brun*, Buff.)

THIS stout Gull is two feet in length, and between four and five from tip to tip of the extended wings, and weighs about three pounds. The bill is dark, more than two inches long, strong, much hooked, and sharp at the tip; and, what is singular, it is covered to the nostrils with a kind of cere, something like that of the Hawk tribe. The whole upper plumage is of a deep brown, edged with a dull rust colour: the under parts are of the same colours, but lighter; and in some birds, the head and throat are dashed or mixed with ash grey, and have the secondary quills tipped with white: the tail is white at the root, the shafts are of the same colour, and the webs of deep brown: the legs and toes are covered with coarse black scales; the claws are strong and hooked, the inner one more so than the rest.

This fierce species is met with by navigators in the high latitudes of both hemispheres, where they are much more common than in the warm or temperate parts of the globe. In Captain Cook's voyages round the world, they are often mentioned; and, from their being numerous about the Falkland Isles, the seamen called them Port-Egmont hens. They are also common in Norway, Iceland, the Shetland and Ferro Isles, &c. It is said that they prey not only upon fish, but also upon the lesser sorts of water-fowl, and even upon young lambs: this, however, is doubted, and, by some of the northern islanders, even denied: they on the contrary assert, that these birds afford protection to the flocks, by driving away the Eagle, which they furiously attack whenever it comes within their reach, and on this account they are highly valued. It is, however, well ascertained that they are uncommonly courageous in defence of their own young, and that they seize, with the utmost vengeance, upon any animal, whether man or beast, that offers to disturb their nests; and it is said also, that they sometimes attack the shepherds even while they are watching their flocks upon the hills, who are obliged, in their own defence, to guard their heads, and to ward off the blows of the assailants by holding a pointed stick towards them, against which they sometimes dash with such force as to be killed on the spot. In like manner, they who are about to rob their nests, hold a knife, or other sharp instrument, over their heads, upon which the enraged bird precipitates, and transfixes itself. They make their nests among the dry grass, and, when the young are reared, they disperse themselves, commonly in pairs, over the ocean.

The feathers of this species, as well as those of other Gulls, are by many people preferred to those of the Goose; and in some parts they are killed in great numbers, merely for the sake of the feathers. On the English coasts they are not very common: that from which the foregoing figure was taken, was shot near Tynemouth, in the month of September.

THE BLACK-TOED GULL.

LABBE, DUNG BIRD, OR BOATSWAIN.

(Larus Crepidatus, Lin.—*Le Stercoraro*, Buff.)

This bird measures sixteen inches and a half in length, and three feet four inches in breadth, and weighs eleven ounces.* The bill is of a lead colour, dark at the point, from which to the brow it is little more than an inch in length: the nostrils are placed near the nail or tip, in a kind of cere not much unlike that of the Skua Gull. The whole upper and under plumage is dark brown, each feather slightly edged and tipped with ferruginous: the greater wing coverts, and the first and secondary quills are dusky, and more distinctly tipped with rusty spots. The tail consists of twelve feathers, the two middle ones

* This is the weight given by Mr Pennant. The specimen from which this figure and description were taken, weighed only eight ounces, but it was very lean. It was shot on the Durham coast, by Mr John Forster, of Newcastle, the first of October, 1800.

longer than the rest; it is of the same colour as the quills, except at the concealed part of its root, which is white. The legs are slender, and of a lead colour; the thighs and part of the joint, and the toes, black: the webs are of the same colour, excepting a small space between the first joints of the toes, which is white.

The black-toed Gull, described by Mr Pennant, differs from this in some particulars: he says, "the head and neck are of a dirty white: the hinder part of the latter plain, the rest marked with oblong dirty spots: the breast and belly are white, crossed with numerous dusky and yellowish lines: the feathers on the sides and vent are barred transversely with black and white: the back, scapulars, coverts of the wings, and tail, are black, beautifully edged with white or pale rust colour: the shafts and tips of the quill feathers are white: the exterior web, and upper half of the interior web, black; but the lower part of the latter white: the tail consists of twelve black feathers tipped with white." The male is said to be blacker and darker than the female.

These birds are not common on the British shores, nor, although widely dispersed over the face of the ocean, are they numerous any where. They do not exceed the Lesser Gulls, or Mews, in size, yet their greater ferocity enables them to carry into effect that continual persecution which is prompted by their ravenous appetite. As soon as they perceive that one of the Mews has seized a prey, they pursue and attack it with the speed and vigour of a Hawk, until the harassed bird, through fatigue or fear, is compelled to drop or disgorge the object of contention, which the pursuer catches in the fall, commonly before it reaches the water. Distant observers have

supposed this dropping substance to be the dung of the fugitive; and hence the Black-toed Gull obtained the name of the Dung-bird.

THE ARCTIC GULL.

FEASER, OR LONG-TAILED LABBE.

(*Larus parasiticus*, Lin.—*Le Labbe à longue queue*, Buff.)

"THE length of this species is twenty-one inches: the bill is dusky, about an inch and a half long, pretty much hooked at the end, but the straight part is covered with a sort of cere. The nostrils are narrow, and placed near the end, like the former. In the male the crown of the head is black: the back, wings, and tail dusky: but the lower part of the inner webs of the quill feathers, white: the hind part of the neck, and the whole under side of the body, white: the tail consists of twelve feathers, the two middlemost nearly four inches longer than the others: the legs black, small, and scaly." "The female is entirely brown; but of a much paler colour below than above: the feathers in the middle of the tail only two inches longer than the others. Linnæus has separated this from its mate, his *Larus Parasiticus*, and made it a synonym to his *Larus Catarractes*, a bird as different from this as any other of the whole genus." *Pennant.*

The habits and manners of this species are the same as those of the last. It pursues the smaller Gulls for the purpose of robbing them of their prey, and like the other, is called the Dung-bird, from similar groundless notions. It is pretty common in the northern parts of Europe, Asia, and America. Numbers of them frequent the

Hebrides in the breeding season, which is from May till August. The female makes her nest of moss on the dry grassy tufts in boggy places, and lays two eggs of an ash colour, spotted with black.

OF THE PETREL.

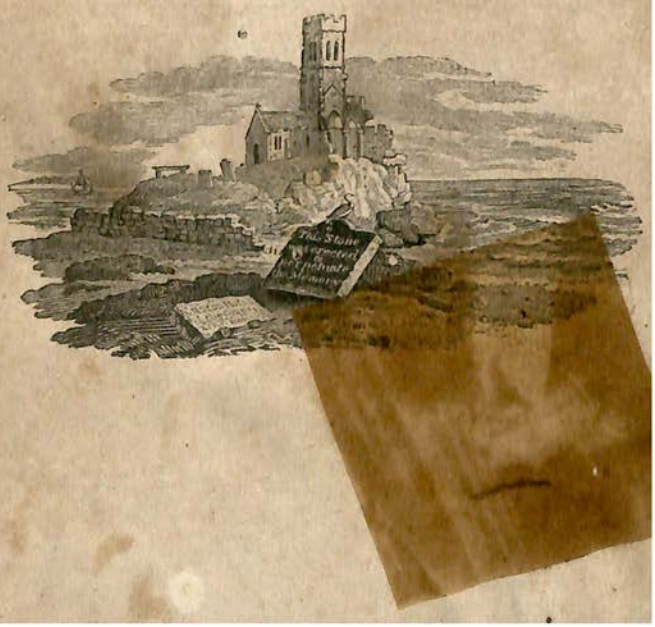
THE bills of this genus are straight, except the end, which is bent or hooked: the nostrils, for the most part, contained in one tube; but in a few species they are distinct and separate. Legs small, and naked above the knees: three toes placed forward, and a spur behind, instead of a back toe: wings very long and strong.

These birds are the constant, roving, adventurous inhabitants of the ocean; one species or another of them is met with by navigators in every climate, and at the greatest distances from land. They seem to sport with the tempest, and run on foot, swim or fly at pleasure over the foaming billows, with amazing velocity.* In flying they generally keep so near to the undulating waters, that the tips of their wings often beat upon the surface, and thereby accelerate their progress. In calm weather they float and repose, as it were, on the bosom of the ocean. They are seldom seen on shore, and when they are, it is only in the breeding season, and then merely for the purposes of incubation. The females deposit their eggs in holes in the ground, or in the deep hidden caverns and recesses of the rocks, where they and their mates, while employed in rearing their young, are heard in croaking, clucking converse, not unlike the unvaried hollow sounds of a number of frogs. They are accounted a stupid race of birds, because they seem fearless of danger, and suffer themselves to be so nearly approached as easily to be shot, or even knocked on the head. In the preservation of their young they seem to have only

* Some species of them are known to dive also. *Cook's Voyages.*

one mode of defence, and that is the singular faculty of squirting oil from their bills, with great force, on the face of their enemy; by which means they sometimes succeed in disconcerting his attempts to rob their nests. They are a remarkably oily fat race of birds.

Ornithologists have reckoned nineteen species, and a few varieties, of the Petrel, whose nostrils are contained in a single tube,—and four species which have nostrils divided into two tubes. Three species only of this genus are accounted British birds.



THE FULMAR,

OR MALLEMOKE.

(*Procellaria glacialis*, Lin.—*Le Fulmar, ou Petrel Puffin gris blanc*, Buff.)

The Fulmar measures seventeen inches in length, and weighs about twenty-two ounces. The bill is strongly formed, and about two inches long; the hook or nail of the upper mandible, and the truncated termination or tip of the under one, are yellow; the other parts of it are of a greyish colour, and, in some specimens, blushed with red: the nostrils are contained in one sheath, divided into two tubes. The head, neck, all the under parts, and the tail, are white: back and wing coverts blue grey: quills dusky blue: legs yellowish, inclining more or less, in some specimens, to red. The body is thickly cloathed with feathers upon a close fine down.

This species is much more common in cold than in warm or temperate climates: it has been met with in

both the arctic and antarctic regions, in all parts which navigators have been able to visit, even to the foot of those impenetrable barriers, the floating islands and eternal mountains of ice and snow.

In the northern parts of the world, the natives of the various coasts and islands easily catch these heedless birds in great numbers. Pennant, speaking of those which breed on, or inhabit, the Isle of St Kilda, says—"No bird is of such use to the islanders as this: the Fulmar supplies them with oil for their lamps, down for their beds, a delicacy for their tables, a balm for their wounds, and a medicine for their distempers." He says also, that it is a "certain prognosticator of the change of the wind: if it comes to land, no west wind is expected for some time; and the contrary when it returns and keeps the sea."

These birds are extremely greedy and gluttonous, and will devour any floating putrid substances, such as the filth from the ships, which they fearlessly follow. They also pursue the whales, but particularly the bloody track of those which are wounded, and in such great flocks as thereby sometimes to discover the prize to the fishers, with whom they generally share; for when the huge animal is no longer able to sink, the Fulmars, in multitudes, alight upon it, and ravenously pluck off and devour lumps of the blubber, till they can hold no more.

The female is said to lay only one large white and very brittle egg, which she hatches about the middle of June.

THE SHEARWATER.

SKRABE, MANKS PETREL, MANKS PUFFIN, OR LYRE.

(*Procellaria Puffinus*, Lin.—*Le Puffin*, Buff.)

THIS species measures in length fifteen inches, and in breadth thirty-one, and weighs about seventeen ounces. The bill is about an inch and three quarters long; the tip black, the other parts yellowish: the tubular nostrils are not so prominent as in others of this genus. The inner coverts of the wings, and under parts of the body, are white: the head, tail, thighs, and upper parts black, tinted more or less with grey: the legs are flattened on the sides, and weak; light-coloured, or whitish on the fore parts, and dusky behind.

The Shearwater is found in greater or smaller numbers in almost every part of the watery world, in both hemispheres, and in every climate; but they are met with in greater abundance in the north. In the Hebrides, and other islands with which the seas of Scotland are dotted,

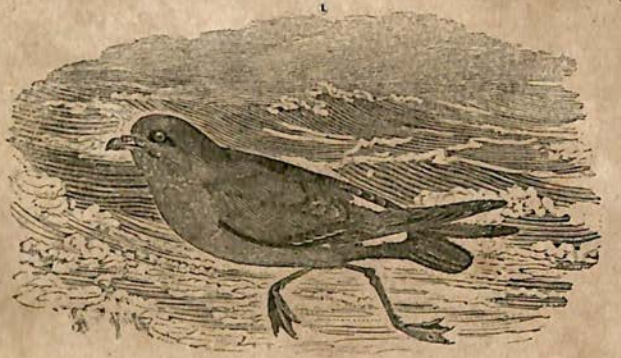
these birds are caught by the natives in great numbers, and are used for the same purposes as the Fulmar.

Willoughby, whose excellent ornithology has thrown so much light on this branch of natural history, and cleared the paths for subsequent writers, gives the following account of the coming of these birds to breed in the Isle of Man:—

"At the south end of the Isle of Man lies a little islet, divided from Man by a narrow channel, called the Calf of Man, on which are no habitations but only a cottage or two lately built. This islet is full of rabbits, which the Puffins coming yearly dislodge, and build in their burroughs. They lay each but one egg before they sit, like the Razor-bill and Guillem, although it be the common persuasion that they lay two at a time, of which the one is always addle." "The old ones early in the morning, at break of day, leave their nests and young, and the island itself, and spend the whole day in fishing at sea, and never returning or once setting foot on the island before evening twilight: so that all day the island is so quiet and still from all noise as if there were not a bird about it." He observes that they feed the young ones from the contents of their loaded stomachs during the night, that they become extremely fat, and are taken and salted down for keeping, and that the Romish church permitted them to be eaten in lent. He adds further respecting the young ones:—"When they come to their growth, they who are intrusted by the lord of the island (the Earl of Derby) to draw them out of the rabbit-holes, that they may the more readily know and keep account of the number they take, cut off one foot, and reserve it, which gave occasion to that fable, that the Puffins are

single footed. They usually sell them for about ninepence the dozen, a very cheap rate."

The above figure was taken from a stuffed specimen in the Wycliffe museum.



THE STORMY PETREL.

STORM FINCH, OR LITTLE PETREL.

(*Procellaria pelagica*, Lin.—*L'Oiseau de Tempète*, Buff.)

THIS is the least of all the web-footed birds, measuring only about six inches in length, and thirteen in breadth. The bill is half an inch long, hooked at the tip; the nostrils tubular. The upper parts of the plumage are black, sleek, and glossed with bluish reflections: the brow, cheeks, and under parts, sooty brown: the rump, and some feathers on the sides of the tail, white: legs slender, black, and scarcely an inch and three quarters in length, from the knee joint to the end of the toes.

This bird resembles the Chimney Swallow in general appearance, in the length of its wings, and in the swiftness of its flight. It is sometimes met with by navigators on every part of the ocean, diving, running on foot, or skimming over the surface of the heavy rolling waves of the most tempestuous sea, quite at ease, and in security;

and yet it seems to foresee, and fear the coming storm, long before the seaman can discover any appearance of its approach; and this these little sure prognosticators make known by flocking together under the wake of the ship, as if to shelter themselves from it, or to warn the mariners, and prepare them to guard against the danger. They are silent during the day, and their clamorous piercing cry is heard only in the night. In the breeding season they betake themselves to the promontories, where, in the fissures of the rocks, they breed and rear their young, which they conduct to the watery element as soon as they are able to crawl, and immediately lead them forward to roam, with themselves, over the dreary and trackless waste.

Mr Pennant, on the authority of Brunnich, says, that "the inhabitants of the Ferro Isles make this bird serve the purposes of a candle, by drawing a wick through the mouth and rump, which being lighted, the flame is fed by the fat and oil of the body." Like others of this genus, it squirts oil from its bill on the face of its enemy.

Although it has been generally said that these birds are never seen but at sea, except during the period of incubation; yet some instances occur of their having been shot inland. Mr Latham speaks of one which was shot at Sandwich, in Kent, in a storm of wind, among a flock of Hoopoes, in the month of January,—of another shot at Walthamstow, in Essex,—and of a third which was killed near Oxford. The late M. Tunstall, Esq. of Wycliffe had one sent to him, which was shot near Bakewel, in Derbyshire; and the specimen from which the above figure and description were taken, was found dead in a field near Ripon, in Yorkshire, and obligingly sent

to the author by Lieutenant-Colonel Dalton, late of the 4th dragoons. It is probable that sickness, or the extreme violence of some hurricane had driven these birds so far from their natural element.

OF THE MERGUS.

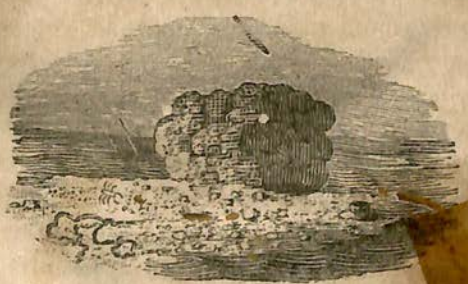
Birds of this genus have roundish slender bills, furnished at the end with a hard, horny, crooked nail; edges of the mandibles very sharply toothed, or serrated; nostrils small, subovated and placed near the middle of the bill: tongue rough, with hard indented papillæ turned backward: legs short; feet webbed; toes long, and the outer ones about the same length as the middle: the head is small, but the quantity of soft silky feathers with which it is furnished, and which they can bristle up from the nape of the neck to the brow, gives it a large appearance. They are a broad, long-bodied, and flat-backed kind of birds, and swim very squatly on the water, the body seeming nearly submerged, with only the head and neck clearly seen. They are excellent divers, remaining a long while under water, and getting to a great distance before they appear again. They fly near the surface of the water, and, notwithstanding the shortness of their wings, with great swiftness, though seldom to any great distance. They devour a large quantity of fish; and their pointed, sharp-toothed, and hooked bills are well calculated for holding fast their slippery prey, none of which, when once within their gripe, can escape.

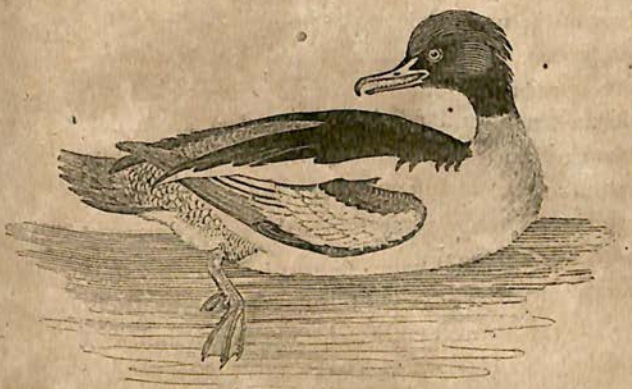
Latham enumerates six species and three varieties of this genus, five of which are accounted British birds. George Strickland, Esq. of Ripon, to whom this work is much indebted for sundry communications, enumerates six species of this genus, which are all met with in Great Britain and its adjacent isles: the author agrees with him likewise in opinion, that much remains to be done in order to clear up the doubts in which their history is

involved, and by which the classification of the different species is confused: he says—" The genus *Mergus*, though only a very small tribe of birds, still remains in the greatest obscurity, and I have not yet met with any ornithologist who has not, in my opinion, multiplied the number of the species, by considering birds of this genus as of different kinds, when they differed only in sex." His arrangement is as follows:—

GENUS MERGUS.

Species 1. *Merganser*.....Goosander.
2. *Castor*.....Dun-Diver.
3. *Serrator*.....Less Dun-Diver.
4. *Albellus*.....Smew.
5. ———.....Lough-Diver.
6. *Minutus*.....Red-headed Smew.





THE GOOSANDER.

(*Mergus Merganser*, Lin.—*L'Harle*, Buff.)

THE male generally weighs about four pounds, and measures in length nearly two feet, and in breadth three feet two inches. The bill is slender, and turned a little upwards; it is three inches long from the hooked nail or tip to the corners of the mouth, but little more than two inches on the ridge; both mandibles are black on the upper and under parts, and crimson on the sides; they are sharply toothed on the edges, and on the inside of the upper, which is narrow, thin, and hard at the tip, there is a double row of smaller teeth: the tongue is furnished with a similar kind of double row, running along the middle, and edged with a kind of hairy border: the irides are commonly of a fine red colour, but in some dusky. The head is covered or crowned with a great quantity of feathers, which, when erected, form a crest; at other times they are laid flatly down, and fall over the nape of the neck: these feathers are of a glossy bottle

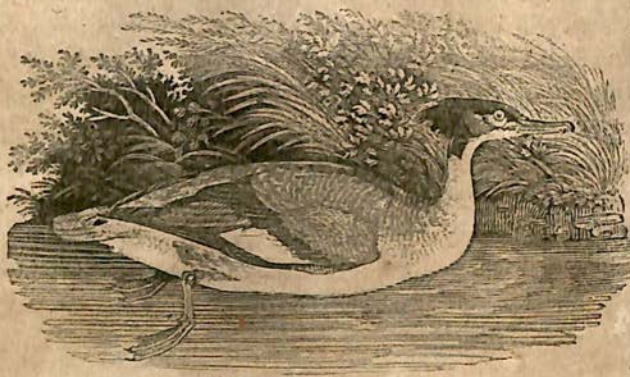
green colour; and the cheeks, throat, and upper fore part of the neck, dull black: the lower part of the neck, the breast, belly, vent, and inner coverts of the wings are of a beautiful kind of cream colour: the upper part of the back, and adjoining scapulars are a fine glossy black; the others bordering on the wing, white: the coverts at the setting on of the wing, black; the rest pure white; the secondary quills are the same, narrowly edged with black; the primaries dusky: the middle of the back and rump are ash colour; from the thighs to the sides of the tail, waved and freckled with ash and white: the tail consists of eighteen dark bluish grey feathers: the legs and feet are deep scarlet, like sealing-wax. Willoughby says—"It hath a huge bony labyrinth on the windpipe, just above the divarications; and the windpipe hath, besides, two swellings out, one above another, each resembling a powder-puff."* It is probable that the whole genus have a similar kind of windpipe, and that the use of it is to contain the air which the bird respires while diving, and remaining long under water.

The Goosander is an inhabitant of the cold northern latitudes, and seldom makes its appearance in the temperate or more southern climates, to which it is driven only by the inclemency of the weather, in severe winters, in search of those parts of rivers or lakes which are not bound up by the frost. It leaves this country early in the spring, and goes northward to breed, and is never seen during the summer months in any part of England; but in hard winters (which the appearance of these birds presages) they are common on the fresh water pools, rivers, and fens in the east riding of Yorkshire, and on

* The Red-breasted Goosander has the same.

the fens of Lincolnshire. Their flesh is by some accounted rank and fishy; others say that it is dry unpleasant food, and, in corroboration of this, quote the old vulgar proverb, "He who would regale the devil, might serve him with Merganser and Cormorant." The author, in some instances, has found these proverbs to be not well founded; but never having tasted of this particular species, he cannot hazard a contrary opinion.

The foregoing description was taken from a bird in full plumage, with which this work was favoured by Robert Pearson, Esq. of Newcastle, 20th March, 1800.



THE DUN-DIVER,

OR SPARLING-FOWL.

(*Mergus Castor*, Lin.—*L'Harle cendré, ou le Bievre*, Buff.)

THIS is of the same form as the Goosander, but differs from that bird in its plumage and size: it measures twenty-seven inches in length, and thirty-five in breadth, and, when in good condition, weighs sometimes between three and four pounds. The bill, from the tip to the corners of the mouth, is two inches and a quarter long, of a red colour, but darker on its ridge; the hooked horny nail of the upper mandible is blackish; the tip of the under one white. The head and upper part of the neck are of a deep chesnut; the crest, the feathers of which are soft, very long, and pendent, is of a deeper shade of the same colour: the chin and upper part of the throat are white: the back, scapulars, coverts of the wings, rump, and sides of the body, are of a bluish ash or lead colour: the fore part of the neck, the breast, belly, and vent, are yellowish white; the bastard and

primary quills dark brown: a large white patch or bar is formed on the middle of the wing, by the tips of the greater coverts and the outer webs of six of the secondary quills; but those nearest to the body are of a hoary dark ash: the tail, which consists of fourteen feathers, is nearly of the same colour: the legs are orange red.

The habits, manners, and haunts of this species are nearly the same as those of the last; but the Dun-diver is met with in this country in greater numbers.* They have long been looked upon and treated of by ornithologists as the female of the Goosander; later observations, however, have wrought a change of opinion among the modern investigators of this branch of natural history, and it is now generally agreed that the Dun-diver is a distinct species. Dr Heysham, of Carlisle, was probably the first who, by dissection, removed some of the doubts in which this matter was involved: in his Catalogue of Cumberland Animals,† he says, "This has generally been considered as the female of the Goosander." "The following circumstances which have come under my observation, however, render this opinion somewhat doubtful: 1st, The Dun-divers are far more numerous than the Goosanders. 2d, The Dun-divers are all less than the Goosanders, (the largest I have seen being little more than three pounds) but of various sizes, some being under two pounds. 3d, The crest of the Dun-diver is considerably longer than the crest (if it can be so called)

* Latham, on the authority of Mr Jackson, says they breed on the islands of the river Shannon, near Killaloe, in Ireland, and are frequently seen there the whole summer.

† See the additional ornaments to Hutchinson's History of Cumberland.

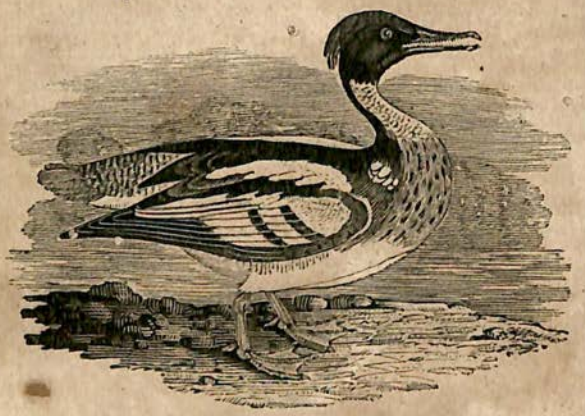
of the Goosander. 4th, Dun-divers have been found, upon dissection, to be males. 5th, The neck of the largest Dun-diver, and which has proved to be a male, is nothing like so thick as the neck of the Goosander."

"On the 26th of December, 1783, I dissected a Dun-diver, which was rather more than three pounds in weight; its length was twenty-seven inches, and its breadth thirty-five inches. It proved to be a male: the testes, though flaccid, were very distinct, and about half an inch in length. In the middle of January, 1786, I received two Dun-divers, both of which I dissected: the first was a small one, about two pounds in weight; it proved to be a female; the eggs were very distinct: the second was much larger, and weighed three pounds; its crest was longer, and its belly of a fine yellowish rose colour: it was a male, and the testes were beginning to grow turgid. I have dissected only one Goosander, and that proved to be a male. Therefore, until a Goosander be found, upon dissection, to prove a female, or two Goosanders to attend the same nest, the doubts respecting these birds cannot be satisfactorily removed."

Although Willoughby describes this as the female Goosander, yet he expresses his doubts of the matter, from its being, like that bird, furnished with a kind of large labyrinth, which, he says, is to be found in the males only of the Duck tribe, and whence he conjectures that this is also peculiar to all the males of the *Mergi*, and that all the females are without it; but he notices one of this family (which at Venice is called *Cokall*) in which this labyrinth, or enlargement of the windpipe, was wanting. Respecting the Dun-diver he further observes, that "the stomach of this bird is as it were a crop

and a gizzard joined together. The upper part, resembling the craw, hath no wrinkles or folds in its inner membrane, but is only granulated with small papillary glandules, resembling the little protuberances on the third ventricle of a Beef, called the Manifold, or those on the shell of a Sea-urchin."

The above figure was drawn from one in full plumage and perfection, for which this work was indebted to Robert Pearson, Esq. of Newcastle, the 28th of February, 1801.



THE RED-BREASTED MERGANSER.

(*Mergus Serrator*, Lin.—*L'Harle huppè*, Buff.)

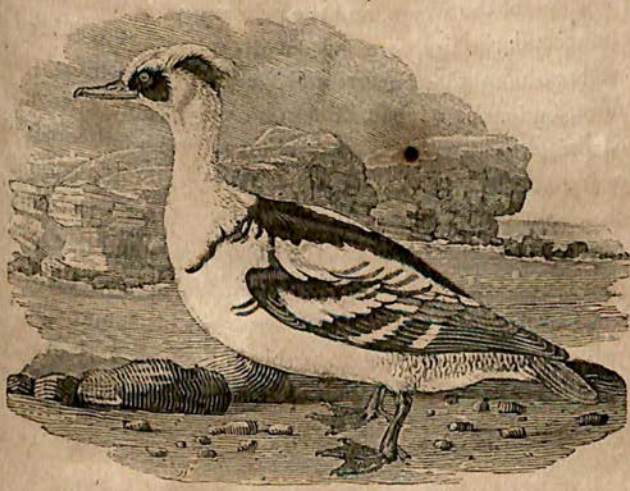
THIS bird measures one foot nine inches in length, and two feet seven in breadth, and weighs about two pounds. The bill, from the tip to the angles of the mouth, is three inches in length, slender, and of a rather roundish form, and like those of the rest of this genus, hooked at the tip, and toothed on the edges: the upper mandible is dark brown, tinged with green, and edged with red; the lower one wholly red: the irides are deep red: the head, long pendent crest, and upper part of the neck, are of a glossy violet black, changing in different lights to a beautiful gilded green: the rest of the neck and belly white: the breast rusty red, spotted with black on the front, and bordered on each side with five or six white feathers, edged with black: the upper part of the back, glossy black; the lower, the rump, and sides, are prettily

marked with transverse zigzag lines of brown and pale grey: the ridge of the wings, and adjoining coverts are dusky; the feathers nearest to the wings are white: the greater coverts, and some of the secondary quills, black and white; the others, and the scapulars, are also party coloured of the same hue: the primary quills are black; some of those next to the body tipped with white, and others of them white on the upper half, and black to their points. The tail is short, its colour brown: the legs and feet are of a deep saffron-coloured red. These birds, both male and female, are said to differ much in their plumage; some having more white on them than others, and some also brighter colours, and more distinctly marked.

The female (which the author has not seen) is described as differing from the male in having only the rudiment of a crest. Mr Pennant says—"The head and upper part of the neck are of a deep rust-colour: throat white: fore part of the neck and breast marbled with deep ash colour: belly white: great quill-feathers dusky: lower half of the nearest secondaries black; the upper white: the rest dusky: back, scapulars, and tail, ash-coloured: the upper half of the secondary feathers white; the lower half black; the others dusky."

In a male of this species which was shot at Sandwich, in Kent, Latham says—"I observed that the feathers which compose the crest, were simply black; also down the middle of the crown, as well as the space before the eye, and beneath the chin and throat; but in the rest of the neck the black had a gloss of green." He also describes it as having "a curious and large labyrinth," similar, it is supposed, to those of other males of this genus which have been noticed before.

The Red-breasted Merganser is not common in Britain, particularly in the southern parts of the island; but they are met with in great flocks at Newfoundland, Greenland, and Hudson's Bay, during the summer months; they are found also in various other northern parts of the world, and in the Mediterranean sea.



THE SMEW,

OR WHITE NUN.

(*Mergus albellus*, Lin.—*Le petit Harle huppé, ou la Piette*, Buff.)

THE Smew is about the size of a Wigeon: the bill is nearly two inches long, of a dusky blue colour, thickest at the base, and tapering into a more slender and narrow shape towards the point: it is toothed like those of the rest of this tribe: the irides are dark: on each side of the head, an oval-shaped black patch, glossed with green, is extended from the corners of the mouth over the eyes: the under side of the crest is black; the other parts of the head and neck white: the breast, belly, and vent are also white, excepting a curved black stroke, pointing forward from the shoulders on each side of the upper part of the breast, which, on the lower part, has also similar strokes pointing the same way: the back, the coverts on

the ridge of the wings, and the primary quills, are black: the secondaries and greater coverts black, tipped with white: the middle coverts and the scapulars white: the sides, under the wings to the tail, are agreeably variegated and crossed with dark waved lines. The tail consists of sixteen dark ash coloured feathers; the middle ones are about three inches and a half long, the rest gradually tapering off shorter on each side: the legs and feet are of a bluish lead colour. This species is at once distinguished from the rest of the *Mergi* by its black and white piebald appearance, although the individuals vary from each other in the proportion and extent of those colours on their plumage.

THE RED-HEADED SMEW,

OR WEESEL COOT.

(Mergus minutus, Lin.—*L'Harle etoilé*, Buff.)

This bird measures fifteen inches and a half in length, and twenty-four in breadth, and weighs about fourteen or fifteen ounces. The bill is of a bluish lead colour, the tip dusky: the head and crest are of a reddish brown, with a dusky spot between the bill and the eyes: the cheeks, throat, belly, sides of the body, and vent are white: the middle of the neck is encircled with pale brown; the lower part of it, the breast, and shoulders, are clouded with dingy brown and pale grey: the ridge of the wings, and adjoining lesser coverts are grey; the middle coverts white; the greater and the secondary quills, like those of the Smew, black, tipped with white; the primary quills dusky: the back, scapulars, rump, and tail, of a deep brownish ash colour; legs and feet dull pale blue.

The Red-headed Smew has long been considered, by some ornithologists, as a distinct species; while others have maintained that it is only the female of the last; and this matter is still doubtful. Mr Pennant, in the supplement to his Arctic Zoology, says, it is now found to be the female of the Smew; Mr Latham is of the same opinion; but Mr Strickland thinks differently; he rests his opinion chiefly on the great disproportion in their weight: the former, he says, is two pounds two ounces, while this is only about fourteen ounces.

THE LOUGH-DIVER.

This is somewhat less than the Smew. "The head and hinder part of the neck are rust-coloured: the head slightly crested: back, scapulars, and tail dusky: fore part of the neck white: breast clouded with grey: on the lesser coverts of the wings a great bed of white; on the primaries and greater coverts two transverse lines of white: legs dusky." In describing this as the female of the Smew, Mr Pennant says it has "around the eyes a spot of the same colour and form as in the male;" he afterwards corrects his error in supposing it the female, and adds—"The bird I thought to be the female, and called the Lough-diver, is a distinct kind. Mr Plymley informs me that he dissected several, and found males and females without any distinction of plumage in either sex."

Having had no opportunity of examining either of the two birds last described, the author has been obliged to relate merely what others have said concerning them, and is at a loss how to reconcile their different opinions, not only indeed concerning these, but others of this tribe; to some of which no known females have yet been distinctly attached: and whilst it is evident that this is a circumstance which cannot happen, it is also plain that much further investigation is necessary in order to elucidate their history. The finishing hand of some scientific ornithologist is yet wanting, whose zeal and industry in the pursuit may be rewarded by the means and opportunities of acquiring such information as may clear up those doubts, and remove those difficulties, which have hitherto rendered this class of birds so imperfectly known.

The Lough-diver, the White Nun, and the Red-headed Smew seldom visit this country, except in very severe winters, by which they are driven from their haunts in the northern parts of the world. Their manners and habits are alike; they also differ little from the rest of the genus, which all live on fish of various kinds, which they eagerly hunt after, both at sea and in the fresh water lakes, as necessity or inclination impels them to visit the one or the other.

OF THE ANAS.

THE bill of this genus is strong, broad, depressed, or flat, and commonly furnished at the end with a nail; the edges of the mandibles divided into lamillæ or teeth: nostrils small and oval: tongue broad, edges, near the base, fringed: feet webbed; the middle toe the longest.

This genus, in which ornithologists have included all the Swans, Geese, and Ducks, amounts, according to the latest enumeration, to ninety-eight species, and about fourteen varieties; thirty-three of the former, and one of the latter, are accounted British birds.

From the Swan downward to the Teal, they are all a clean-plumaged beautiful race of birds, and some of them exquisitely so. Those which have been reclaimed from a state of nature, and live dependent on man, are extremely useful to him: under his protection they breed in great abundance, and without requiring much of his time or care, lead their young to the pool almost as soon as they are hatched, where they instantly, with instinctive perception, begin to search for their food, which at first consists chiefly of weeds, worms, and insects; these they sift, as it were, from the mud, and for that purpose their bills are admirably adapted. When they are further advanced in life, they pick up the soon scattered grain of the farm-yard, which, but for their assiduous searchings, would be lost. To them also are allotted the larger quantities of corn which are shaken by the winds from the over-ripened ears in the fields. On this clean and simple food they soon become fat, and their flesh is accounted delicious and nourishing.

In a wild state, birds of various kinds preserve their original plumage; but when tamed they soon begin to vary, and shew the effects of domestication: this is the case with the Tame Goose and the Duck, which differ as much from the wild of their respective kinds, as they do from each other.

THE WILD SWAN.

ELK, HOOPER, OR WHISTLING SWAN.

(*Anas Cygnus ferus*, Lin.—*Le Cygne sauvage*, Buff.)

THE Wild Swan measures five feet in length, and above seven in breadth, and weighs from thirteen to sixteen pounds. The bill is three inches long, of a yellowish white from the base to the middle, and thence to the tip, black: the bare space from the bill over the eye and eyelids is yellow: the whole plumage in adult birds is of a pure white, and, next to the skin, they are cloathed with a thick fine down: the legs are black.

This species generally keeps together in small flocks, or families, except in the pairing season, and at the setting in of winter. At the latter period they assemble in immense multitudes, particularly on the large rivers and lakes of the thinly inhabited northern parts of Europe, Asia, and America: but when the extremity of the weather threatens to become insupportable, in order to shun the gathering storm, they shape their course, high in air, in divided and diminished numbers, in search of milder climates. In such seasons they are most commonly seen in various parts of the British isles, and in other more southern countries of Europe. The same is observed of them in the North American states. They do not, however, remain longer than [illegible] the approaching of the spring, when they again retire northward to the arctic regions to breed. A few, indeed, drop short, and perform that office by the way, for they are known to breed in some of the Hebrides, the Orkney, Shetland, and other solitary isles; but these are hardly worth notice: the great bodies of them are met with in the large

rivers and lakes near Hudson's Bay, and those of Kamtschatka, Lapland, and Iceland. They are said to return to the latter place in flocks of about a hundred at a time, in the spring, and also to pour in upon that island from the north, in nearly the same manner, on their way southward in the autumn. The young which are bred there remain throughout the first year; and in August, when they are in moult, and unable to fly, the natives taking advantage of this, kill them with clubs, shoot, and hunt them down with dogs, by which they are easily caught. The flesh is highly esteemed by them as a delicious food, as are also the eggs, which are gathered in the spring. The Icelanders, Kamtschatdales, and other natives of the northern world, dress their skins with the down on, sew them together, and make them into garments of various kinds: the northern American Indians do the same, and sometimes weave the down as barbers weave the cawls for wigs, and then manufacture it into ornamental dresses for the women of rank, while the larger feathers are formed into caps and plumes to decorate the heads of their chiefs and warriors. They also gather the feathers and down in large quantities, and barter or sell them to the inhabitants of more civilized nations.

Buffon is of opinion that the Tame Swan has been derived originally from the wild species; other naturalists entertain a contrary opinion, which they form chiefly on the difference between them in the singular conformation of the windpipe. Willoughby says, "The windpipe of the Wild Swan, after a strange and wonderful manner enters the breast bone in a cavity prepared for it, and is therein reflected, and after its egress at the

divarication is contracted into a narrow compass by a broad and bony cartilage; then being divided into two branches, goes on to the lungs: these branches before they enter the lungs, are dilated, and as it were swollen out into two cavities." Dr Heysham corroborates the above, and adds, that the Wild Swan, in this particular, differs not only from the Tame Swan, but also from every other bird. The only observable external difference between the two species is in the markings of the bill, (which are figured in the subjoined head) and in the Wild Swan's being of less bulk than the Mute or Tame kind.

Much has been said in ancient times, of the singing of the Swan, and many beautiful and poetical descriptions have been given of its dying song. "No fiction of natural history, no fable of antiquity, was ever more celebrated, oftener repeated, or better received: it occupied the soft and lively imagination of the Greeks; poets, orators, and even philosophers, adopted it as a truth too pleasing to be doubted." "The dull insipid truth," however, is very different from such amiable and affecting fables, for the voice of the Swan, singly, is shrill, piercing, and harsh, not unlike the sound of a clarionet when blown by a novice in music. It is, however, asserted by those who have heard the united and varied voices of a numerous assemblage of them, that they produce a more harmonious effect, particularly when softened by the murmur of the waters.

At the setting in of frosty weather, the Wild Swans are said to associate in prodigious multitudes, and thus united, to use every effort to prevent the water from freezing: this they accomplish by the continual stir kept up amongst them; and by constantly dashing it with

their extended wings, they are enabled to remain as long as it suits their convenience, in some favourite part of a lake or river which abounds with their food.

The Swan is very properly entitled the peaceful Monarch of the Lake: conscious of his superior strength, he fears no enemy, nor suffers any bird, however powerful, to molest him; neither does he prey upon any one. His vigorous wing is as a shield against the attacks even of the Eagle, and the blows from it are said to be so powerful as to stun or kill the fiercest of his foes. The Wolf or the Fox may surprise him in the dark, but their efforts are vain in the day. His food consists of the grasses and weeds, and the seeds and roots of plants, which grow on the margins of the water, and of the myriads of insects which skim over, or float on its surface; also occasionally of the slimy inhabitants within its bosom.

The female makes her nest of the withered leaves and stalks of reeds and rushes, and lays commonly six or seven thick-shelled white eggs: she is said to sit upon them six weeks before they are hatched. Both male and female are very attentive to their young, and will suffer no enemy to approach them.

THE MUTE SWAN,

OR TAME SWAN.

(*Anas Cygnus mansuetus*, Lin.—*Le Cygne*, Buff.)

The plumage of this species is of the same snowy whiteness as that of the Wild Swan, and the bird is covered next the body with the same kind of fine close down; but it greatly exceeds the Wild Swan in size, weighing about twenty-five pounds, and measuring more in the length of the body and extent of the wings. This also differs in being furnished with a projecting, callous, black tubercle, or knob, on the base of the upper mandible, and in the colour of the bill, which in this is red,

with black edges and tip: the naked skin between the bill and the eyes is also of the latter colour: in the Wild Swan this bare space is yellow.

The manners and habits are much the same in both kinds, particularly when they are in a wild state; for indeed this species cannot properly be called domesticated; they are only as it were partly reclaimed from a state of nature, and invited by the friendly and protecting hand of man to decorate and embellish the artificial lakes and pools which beautify his pleasure grounds. On these the Swan cannot be accounted a captive, for he enjoys all the sweets of liberty. Placed there, as he is the largest of all the British birds, so is he to the eye the most pleasing and elegant. What in nature can be more beautiful than the grassy-margined lake, hung round with the varied foliage of the grove, when contrasted with the pure resplendent whiteness of the majestic Swan, wafted along, with erected plumes, by the gentle breeze, or floating, reflected on the glossy surface of the water, while he throws himself into numberless graceful attitudes, as if desirous of attracting the admiration of the spectator?

The Swan, although possessed of the power to rule, yet molests none of the other water birds, and is singularly social and attentive to those of his own family, which he protects from every insult. While they are employed with the cares of the young brood, it is not safe to approach near them, for they will fly upon any stranger, whom they often beat to the ground by repeated blows; and they have been known by a stroke of the wing to break a man's leg. But, however powerful they are with their wings, yet a slight blow on the head will kill them.

The Swan, for ages past, has been protected on the river Thames as royal property; and it continues at this day to be accounted felony to steal their eggs. "By this means their increase is secured, and they prove a delightful ornament to that noble river." Latham says, "In the reign of Edward IV. the estimation they were held in was such, that no one who possessed a freehold of less than the clear yearly value of five marks, was permitted even to keep any." In those times, hardly a piece of water was left unoccupied by these birds, as well on account of the gratification they gave to the eye of their lordly owners, as that which they also afforded when they graced the sumptuous board at the splendid feasts of that period: but the fashion of those days is passed away, and Swans are not nearly so common now as they were formerly, being by most people accounted a coarse kind of food, and consequently held in little estimation: but the Cygnets (so the young Swans are called) are still fattened for the table, and are sold very high, commonly for a guinea each, and sometimes for more: hence it may be presumed they are better food than is generally imagined.

This species is said to be found in great numbers in Russia and Siberia, as well as further southward, in a wild state. They are, without an owner, common on the river Trent, and on the salt-water inlet of the sea, near Abbotsbury, in Dorsetshire; they are also met with on other rivers and lakes in different parts of the British isles.

It is the generally received opinion that the Swan lives to a very great age, some say a century, and others have protracted their lives to three hundred years! Strange

brown or black stripe runs down the hinder part of the neck, from the head to the back: the fore part of the neck, and the breast, are yellowish brown: the back, and all the upper parts, brownish grey, edged with a lighter colour: the sides, and the feathers which cover the thighs, are clouded nearly of the same colours as the back, and edged with white: belly white: legs orange.

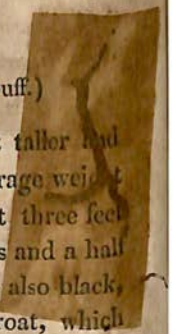
It is said that these birds originally were found in Guinea only: now they are become pretty common, in a wild as well as a domesticated state, both in warm and in cold climates.

Tame Geese of this species, like other kinds, vary much, both in the colour of the bill, legs, and plumage, as well as in size; but they all retain the knob on the base of the upper mandible, and rarely want the pouch or wattle under the gullet. They are kept by the curious in various parts of England, and are more noisy than the Common Goose: nothing can stir, in the night or day, without their sounding the alarm, by their hoarse cacklings and shrill cries. They breed with the Common Goose, and their offspring are as prolific as those of any other kind. The female is smaller than the male: "the head, neck, and breast are fulvous; paler on the upper part: the back, wings, and tail, dull brown, with pale edges: belly white: in other respects they are like the male, but the knob over the bill is smaller."

THE CANADA GOOSE,

OR CRAVAT GOOSE.

(Anas Canadensis.—L'Oie à Cravate, Buff.)



This is less than the Swan Goose, but taller and longer than the Common Goose. Their average weight is about nine pounds, and the length about three feet six inches. The bill is black, and two inches and a half long: irides hazel: the head and neck are also black, with a crescent-shaped white band on the throat, which tapers off to a point on each side below the cheeks, to the hinder part of the head: the whiteness of this cravat is heightened by its contrast with the dark surrounding plumage, and it looks very pretty: this mark also distinguishes it from others of the Goose tribe. All the upper parts of the plumage, the breast, and a portion of the belly, are of a dull brown, sometimes mixed with grey: the lower part of the neck, the belly, vent, and upper tail coverts, white: quills and tail black: legs dingy blue.

This is another useful species which has been reclaimed from a state of nature, and domesticated and multiplied in many parts of Europe, particularly in France and Germany; and is not very uncommon in England. It is as familiar, breeds as freely, and is in every respect as valuable as the Common Goose: it is also accounted a great ornament on ponds near gentlemen's seats. Buffon says, "Within these few years, many hundreds inhabited the great canal at Versailles, where they lived familiarly with the Swans: they were oftener on the grassy margins than in the water. There is at present a great number of them on the magnificent pools that

decorate the charming gardens of Chantilly." The wild stock whence these birds were taken are found in the northern parts of America; they are one of those immense families, which, when associated with others of the same genus, are said, at certain seasons, to darken the air like a cloud, and to spread themselves over the lakes and swamps in innumerable multitudes.

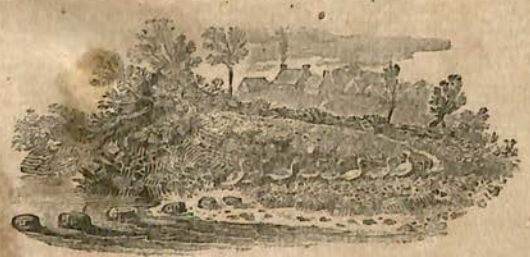
Mr Pennant, in his Arctic Zoology, gives the following interesting account of the mode of taking the Canada Goose in Hudson's Bay:—

"The English of Hudson's Bay depend greatly on Geese, of these and other kinds, for their support; and, in favourable years, kill three or four thousand, which they salt and barrel. Their arrival is impatiently attended; it is the harbinger of the spring, and the month named by the Indians the *Goose* moon. They appear usually at our settlements in numbers, about St George's day, O. S. and fly northward to nestle in security. They prefer islands to the continent, as further from the haunts of men. Thus Marble Island was found, in August, to swarm with Swans, Geese and Ducks; the old ones moulting, and the young at that time incapable of flying.

"The English send out their servants, as well as Indians, to shoot these birds on their passage. It is in vain to pursue them: they therefore form a row of huts made of boughs, at musket-shot distance from each other, and place them in a line across the vast marshes of the country. Each hovel, or, as they are called, *stand*, is occupied by only a single person. These attend the flight of the birds, and, on their approach, mimic their cackle so well, that the Geese will answer, and wheel and come nearer the stand. The sportsman keeps motionless, and

on his knees, with his gun cocked, the whole time; and never fires till he has seen the eyes of the Geese. He fires as they are going from him, then picks up another gun that lies by him, and discharges that. The Geese which he has killed, he sets up on sticks as if alive, to decoy others; he also makes artificial birds for the same purpose. In a good day (for they fly in very uncertain and unequal numbers) a single Indian will kill two hundred. Notwithstanding every species of Goose has a different call, yet the Indians are admirable in their imitation of every one.

"The vernal flight of the Geese lasts from the middle of April until the middle of May. Their first appearance coincides with the thawing of the swamps, when they are very lean. The autumnal, or the season of their return with their young, is from the middle of August to the middle of October. Those which are taken in this latter season, when the frosts usually begin, are preserved in their feathers, and left to be frozen for the fresh provisions of the winter stock. The feathers constitute an article of commerce, and are sent to England."



THE EGYPTIAN GOOSE.

GANSER, OR GAMBO GOOSE.

(*Anas Ægyptiaca*, Lin.—*L'Oie d'Egypte*, Buff.)

THIS beautifully variegated species is nearly of the size of the Grey Lag, or common Wild Goose. The bill red, about two inches in length, tip black, and nostrils dusky: eye-lids red, and the irides pale yellow: the throat, cheeks, and upper part of the head are white: a rusty chesnut-coloured patch on each side of the head surrounds the eyes. About two-thirds of the neck, from the head downwards, is of a pale reddish bay colour, darker at the lower end: a broad deep chesnut-coloured spot covers the middle of the breast: the shoulders and scapulars are of a reddish brown, prettily crossed with numerous dark waved lines: the wing-coverts are white; the greater ones barred near their tips with black: the secondary quills are tinged with reddish bay, and bordered with chesnut; those of the primaries which join them are edged with glossy green, and the rest of the first quills are black: the lower part of the back, the rump and tail, are black: the belly is white, but all the other fore parts, and sides of the body, from the neck to near the vent, are delicately pencilled with narrow rust-coloured zigzag lines on a pale ash-grey ground: each wing is furnished on the bend with a short blunt spur. The colours of the female are pretty much the same as those of the male, but not by any means so bright or distinctly marked.

This kind is common in a wild state in Egypt, at the Cape of Good Hope, and in various parts of the intermediate territories of Africa, whence they have been

brought into, and domesticated in this and other civilized countries, and are now an admired ornament of many pieces of water contiguous to gentlemen's seats; but neither the author nor his correspondents were able to procure a specimen of this or the preceding species, for the purpose of making drawings.

THE RED-BREASTED GOOSE,

OR SIBERIAN GOOSE.

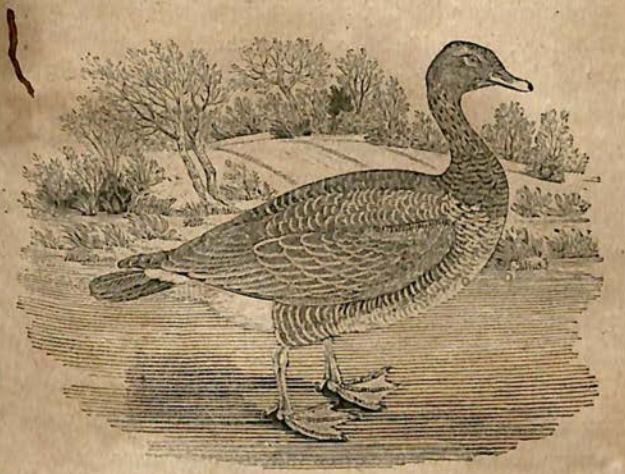
(Anser ruficollis.)

The Red-breasted Goose measures above twenty inches in length, and its extended wings three feet ten in breadth. The bill is short, of a brown colour, with the nail black: irides yellowish hazel: the cheeks and brow are dusky, speckled with white: an oval white spot occupies the space between the bill and the eyes, and is bounded above, on each side of the head, by a black line which falls down the hinder part of the neck: the chin, throat, crown of the head, and hinder part of the neck to the back, are black: two stripes of white fall down from behind each eye, on the sides of the neck, and meet

in the middle: the other parts of the neck, and the upper part of the breast, are of a deep rusty red, and the latter is terminated by two narrow bands of white and black: the back and wings are dusky; the greater coverts edged with grey: sides and lower part of the breast black: belly, upper and under tail coverts, white: legs dusky.

This beautiful species is a native of Russia and Siberia, whence they migrate southward in the autumn, and return in the spring: they are said to frequent the Caspian sea, and are supposed to winter in Persia. They are very rare in this country, only three of them (so far as the author's knowledge extends) having ever been met with in it, and those all by the late M. Tunstall, Esq. of Wycliffe, in Yorkshire, in whose valuable museum the first of these birds, in high preservation, was placed.* It was shot near London in the beginning of the hard frost in the year 1766; and another of them was about the same time taken alive near Wycliffe, and kept there for several years in a pond among the Ducks, where it became quite tame and familiar. Mr Tunstall informed Mr Latham of these particulars, and also mentioned a third of the same kind, which had been shot in some other part of the kingdom. They are said to be quite free from any fishy taste, and are highly esteemed for the table.

* The foregoing figure was taken from this specimen.



THE GREY LAG GOOSE,

OR COMMON WILD GOOSE.

(Anas Anser, Lin.—*L'Oie sauvage*, Buff.)

THIS wild Goose generally weighs about ten pounds, and measures two feet nine inches in length, and five in breadth. The bill is thick at the base, tapers towards the tip, and is of a yellowish red colour, with the nail white: the head and neck are of a cinereous brown, tinged with dull yellow, and from the separations of the feathers, the latter appears striped downwards: the upper part of the plumage is of a deep brown, mixed with ash-grey; each feather is lighter on the edges, and the lesser coverts are tipped with white: the shafts of the primary quills are white, the webs grey, and the tips black: the secondaries black, edged with white: the breast and belly are crossed and clouded with dusky and ash on a whitish ground; and the tail-coverts and vent

are of a snowy whiteness: the middle feathers of the tail are dusky, tipped with white; those adjoining more deeply tipped, and the exterior ones nearly all white; legs pale red.

This species is common in this country, and although large flocks of them, well known to the curious, in all the various shapes which they assume in their flight,* are seen regularly migrating southward in the autumn, and northward in the spring,† yet several of them are known to remain and breed in the fens of Lincolnshire and Cambridgeshire, and it is said, in various other parts of Great Britain. Pennant says they reside in the fens the whole year, breed there, and hatch about eight or nine young ones, which are often taken, easily made tame, and much more esteemed for the excellent flavour of their flesh than the domestic Goose: he adds, "The old

* The elevated and marshalled flight of the Wild Geese, seems dictated by geometrical instinct: shaped like a wedge, they cut the air with less individual exertion; and it is conjectured, that the change of its form from an inverted V, an A, an L, or a straight line, is occasioned by the leader of the van's quitting his post at the point of the angle through fatigue, dropping into the rear, and leaving his place to be occupied by another.

† A gentleman in the county of Durham, one morning in the month of April, observed a flock of Wild Geese going northward, in the line of two objects whose distance he knew to be four miles: he found by his watch the exact time they were in flying this distance; from which he calculated, that if they continued to fly at the same rate for twelve hours, they would be at the Orkneys by sun-set, which is twenty-five miles an hour. But it is not probable that these birds ever migrate from the fens in Cambridgeshire, &c. to the Orkneys, or other places where they breed, in one day, or at one flight; for great numbers of them are known to stop for several days, both in going and coming back again, at the mouth of the Tees, Prestwick-Car, the haughs of the river Till, near Wooler, in Northumberland, and at some places in the Merse in Scotland.

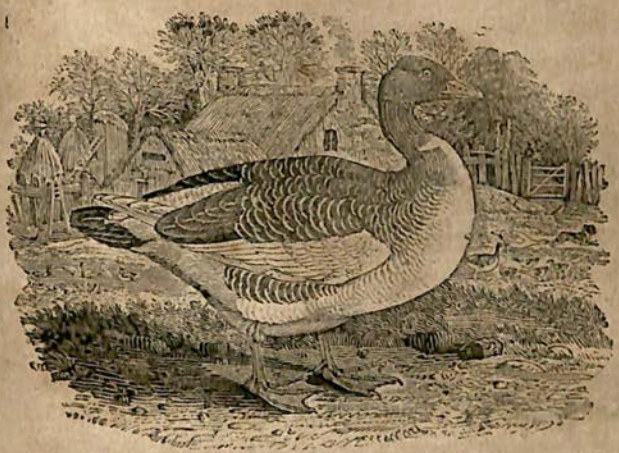
Geese which are shot are plucked and sold in the market as fine tame ones, and readily bought, the purchaser being deceived by the size; but their flesh is coarse."*

This species is widely and numerously spread over all the various parts of the northern world, whence some flocks of them migrate a long way southward in the winter. Latham says they seem to be general inhabitants of the globe, are met with from Lapland to the Cape of Good Hope,—are frequent in Arabia, Persia, and China, as well as indigenous to Japan,—and on the American continent from Hudson's Bay to South Carolina. He also observes that our voyagers have met with them in the Straits of Magellan, Port Egmont in the Falkland Islands, Terra del Fuego, and New Holland. There can be little doubt about the territories assigned to them for their summer residences and breeding places; the lakes, swamps, and dreary morasses of Siberia, Lapland, Iceland, and the unfrequented or unknown northern regions of America seem set apart for that purpose, where, with multitudes of other kinds, in undisturbed security, they rear their young, and are amply provided with a variety of food, a large portion of which must consist of the larvæ of the gnats which swarm in those parts, and the myriads of insects that are fostered by the unsetting sun. Pennant says that these Wild Geese appear in Hudson's Bay early in May, as soon as the ice disappears;—collect in flocks of twenty or thirty, stay about three weeks, then separate in pairs, and take off to breed; that about

* This is the case with all very old Geese, both tame and wild; but the flesh of a middle-aged one of the latter sort, in the spring of the year, when the bird is in full feather, is very tender, finely flavoured, and nowise like that of the Tame Goose either in taste or colour.

the middle of August they return to the marshes with their young, and continue there till September. Some of them are caught and brought alive to the factories, where they are fed with corn, and thrive greatly.

Wild Geese are very destructive to the growing corn in the fields where they happen to halt in their migratory excursions. In some countries they are caught at those seasons in long nets, resembling those used for catching Larks: to these nets the Wild Geese are decoyed by tame ones placed there for that purpose. Many other schemes are contrived to take these wary birds; but as they feed only in the day-time, and betake themselves to the water at night, the fowler must exert his utmost care and ingenuity in order to accomplish his ends: all must be planned in the dark, and every trace of suspicion removed; for nothing can exceed the vigilant circumspection and acute ear of the sentinel, who, placed on some eminence, with out-stretched neck surveys every thing that moves within the circle of the centre on which he takes his stand; and the instant he sounds the alarm, the whole flock betake themselves to flight.



THE TAME GOOSE.

(Anas Anser, Lin.—*L'Oie domestique*, Buff.)

To describe the varied plumage and the economy of this well-known valuable domestic fowl, may seem to many a needless task; but to others, unacquainted with rural affairs, it may be interesting.* Their predominant colours are white and grey, with shades of ash, blue, and brown: some of them are yellowish, others dusky, and many are found to differ very little in appearance from the wild kind last described—the original stock whence, in early times, they were all derived. The only permanent mark, which all the grey ones still retain, like those of the wild kind, is the white ring which surrounds the root of the tail. They are generally furnished with a small tuft on the head; and the most usual colour of

* A certain town lady wondered how a Goose could suckle nine Goslings.

the males (Gander or Steg) is pure white: the bills and feet in both males and females are of an orange red. By studied attention in the breeding, two sorts of these Geese have been obtained: the less are by many esteemed as being more delicate eating; the larger are by others preferred on account of the bountiful appearance they make upon the festive board. The average weight of the latter kind is between nine and fifteen pounds; but instances are not wanting, where they have been fed to upwards of twenty pounds: this is, however, to sacrifice the flavour of the food to the size and appearance of the bird; for they become disgustingly fat and surfeiting, and the methods used to cram them up are unnatural and cruel. It is not, however, altogether on account of their use as food that they are valuable; their feathers, their down, and their quills,* have long been considered as articles of more importance, and from which their owners reap more advantages. In this respect the poor creatures have not been spared: urged by avarice, their inhuman masters appear to have ascertained the exact quantity of plumage of which they can bear to be robbed, without being deprived of life. Mr Pennant, in describing the methods used in Lincolnshire, in breeding, rearing, and plucking Geese, says "they are plucked

* "An English archer bent his bow,
"Made of a trusty tree,—
"An arrow of a cloth-yard long,
"Unto the head, drew he:

"Against Sir Hugh Montgomery
"So right his shaft he set,
"The grey Goose wing that was thereon
"In his heart's blood was wet."

Chevy Chase.

five times in the year: first at Lady-day for the feathers and quills; this business is renewed for the feathers only, four times more between that and Michaelmas:" he adds, that he saw the operation performed even upon Goslings of six weeks old, from which the feathers of the tails were plucked; and that numbers of the Geese die when the season afterwards proves cold. But this unfeeling greedy business is not peculiar to one county, for much the same is practised in others. The care and attention bestowed upon the brood Geese, while they are engaged in the business of incubation, in the month of April, is nearly the same every where: wicker pens are provided for them, placed in rows, and tier above tier, not uncommonly under the same roof with their owners. Some place water and corn near the nests; others drive them to the water twice a-day, and replace each female upon her own nest as soon as she returns. This business requires the attendance of the Gozzard (Goose-herd) a month at least, in which time the young are brought forth: as soon afterwards as the brood are able to waddle along, they are, together with their dams, driven to the contiguous loughs, and fens or marshes, on whose grassy-margined pools they feed and thrive, without requiring any further attendance until the autumn. To these marshes, which otherwise would be unoccupied, (except by wild birds) and be only useless watery wastes, we are principally indebted for so great a supply of the Goose; for in almost every country where lakes and marshes abound, the neighbouring inhabitants keep as many as suit their convenience, and in this way immense numbers annually attain to full growth and perfection. But in no part of the world are such numbers reared as

in the fens of Lincolnshire, where it is said to be no uncommon thing for a single person to keep a thousand old Geese, each of which, on an average, will bring up seven young ones. So far those only are noticed which may properly be called the larger flocks, by which particular watery districts are peopled; and, although their aggregate numbers are great, yet they form only a part of the large family: those of the farm-yard, taken separately, appear as small specks on a great map; but when they are gathered together, and added to those kept by almost every cottager throughout the kingdom, the immense whole will appear multiplied in a ratio almost incalculable. A great part of those which are left to provide for themselves during the summer, in the solitary distant waters, as well as those which enliven the village green, are put into the stubble fields after harvest, to fatten upon the scattered grain; and some are penned up for this purpose, by which they attain to greater bulk; and it is hardly necessary to observe, that they are then poured in weekly upon the tables of the luxurious citizens of every town in the kingdom. But these distant and divided supplies seem trifling when compared with the multitudes which, in the season, are driven in all directions into the metropolis:* the former appear only like the scanty waterings of the petty streamlet; the latter like the copious overflowing torrent of a large river. To the country market towns they are carried in bags and panniers; to the great centre of trade they are sent in droves of many thousands.† To a stranger it is

* In ancient times they were driven in much the same way, from the interior of Gaul to Rome.

† In an article which Mr Latham has copied from the St James's

a most curious spectacle to view these hissing, cackling, gabbling, but peaceful armies, with grave deportment, waddling along (like other armies) to certain destruction. The drivers are each provided with a long stick, at one end of which a red rag is tied as a lash, and a hook is fixed at the other: with the former, of which the Geese seem much afraid, they are excited forward; and with the latter, such as attempt to stray, are caught by the neck and kept in order; or if lame, they are put into an *hospital cart*, which usually follows each large drove. In this manner they perform their journies from distant parts, and are said to get forward at the rate of eight or ten miles in a day, from three in the morning till nine at night: those which become fatigued are fed with oats, and the rest with barley.

It is universally believed that the Goose lives to a great age, and particular instances are recorded by ornithologists, which confirm the fact: some are mentioned which have been kept seventy years; and Willoughby notices one which lived eighty years. They are, however, seldom permitted to live out their natural life, being sold with the younger ones long before they approach that period. The old ones are called *cagmags*, and are bought only by novices in market-making; for, from their toughness, they are utterly unfit for the table.

The Tame Goose lays from seven to twelve eggs, and sometimes more: these the careful housewife divides equally among her brood Geese, when they begin to sit. Those of her Geese which lay a second time in the course

Chronicle of September 2nd, 1785, it is noticed, that a drove of about nine thousand Geese passed through Chelmsford on their way to London, from Suffolk.

of the summer, are seldom, if ever, permitted to have a second hatching; but the eggs are used for household purposes. In some countries the domestic Geese require much less care and attendance than those of this country. Buffon, in his elegant and voluminous Ornithology, in which nothing is omitted, gives a particular detail of their history and economy every where: he informs us, that among the villages of the Cossacks, subject to Russia, on the river Don, the Geese leave their homes, in March or April, as soon as the ice breaks up, and the pairs joining each other, take flight in a body to the remote northern lakes, where they breed and constantly reside during the summer; and that on the beginning of winter, the parent birds, with their multiplied young progeny, all return, and divide themselves, every flock alighting at the door of the respective place to which it belongs.

The Goose has for many ages been celebrated on account of its vigilance. The story of their saving Rome by the alarm they gave, when the Gauls were attempting the capitol,* is well known, and was probably the first time of their watchfulness being recorded; and on that account, they were afterwards held in the highest estimation by the Roman people. It is certain, that nothing can stir in the night, nor the least or most distant noise be made, but the Geese are roused, and immediately begin to hold their cackling converse; and on the nearer approach of apprehended danger, they set up their more shrill and clamorous cries. It is on account of this property that they are esteemed by many persons, as the most vigilant of all sentinels, when placed in particular situations.

* As the poet sings—

" Et servaturis vigili Capitolia voce Anseribus."

THE WHITE-FRONTED WILD GOOSE,

OR LAUGHING GOOSE.

(Anas albifrons.—L'Oie rieuse, Buff.)

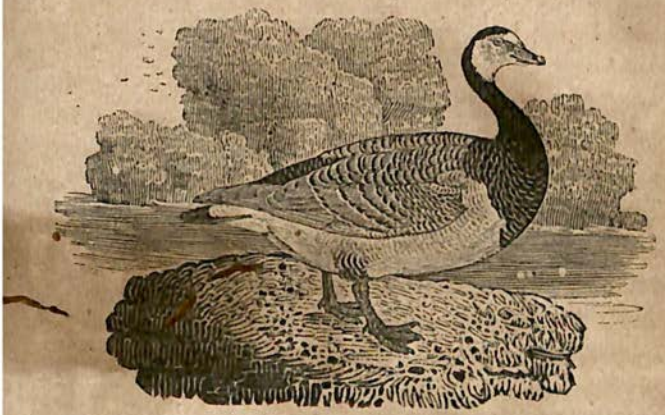
This species measures two feet four inches in length, and four feet six in the extended wings, and weighs about five pounds. The bill is thick at the base, of a yellowish red colour; the nail white; from the base of the bill and corners of the mouth, a white patch is extended over the forehead: the rest of the head, the neck, and the upper parts of the plumage are dark brown: the primary and secondary quills are of the same colour, but much darker; and the wing coverts are tinged with ash: the breast and belly are dirty white, spotted with dusky: the tail is of a hoary ash-coloured brown, and surrounded, like the Lag Goose's, with a white ring at the base: the legs yellow.

These birds form a part of those vast tribes which swarm about Hudson's Bay, and the north of Europe and Asia, during the summer months, and are but thinly scattered over the other quarters of the world. They visit the fens and marshy places in England, in small flocks, in the winter months, and disappear about the beginning of March. It is said that they never feed on the corn-fields, but confine themselves wholly to such wilds and swamps as are constantly covered with water.

THE BEAN GOOSE.

This species differs very little in its general appearance from the Grey Lag Goose, the chief distinction between them being in the bill; which in this is small, much compressed near the end, whitish, and sometimes of a pale red in the middle, and black at the base and nail: the latter is shaped somewhat like a horse-bean, from which the species has obtained the name of Bean Goose. The length of this bird is two feet seven inches; breadth four feet eleven; its weight about six pounds and a half. The head and neck are of a cinereous brown colour, tinged with ferruginous: breast and belly dirty white, clouded with cinereous: sides and scapulars dark ash, edged with white: the back of a plain ash colour: coverts of the tail white: lesser coverts of the wings light grey, nearly white; the middle deeper, tipped with white: primaries and secondaries grey, tipped with black: feet and legs saffron colour; claws black.

These birds arrive in the fen counties in the autumn, and take their departure in May. They are said to alight in the corn fields, and to feed much upon the green wheat, while they remain in England. They are reported to breed in great numbers in the Isle of Lewis, and no doubt on others of the Hebrides, and also at Hudson's Bay.



THE BERNACLE.

CLAKIS, OR TREE GOOSE.

(*Anas Erythropus*, Lin.—*La Bernache*, Buff.)

The Bernacle weighs about five pounds, and measures more than two feet in length, and nearly four and a half in breadth. The bill, from the tip to the corners of the mouth, is scarcely an inch and a half long, black, and crossed with a pale reddish streak on each side: a narrow black line passes from the bill to the eyes, the irides of which are brown: the head is small, and as far as the crown, together with the cheeks and throat, white: the rest of the head and neck, to the breast and shoulders, is black. The upper part of the plumage is prettily marbled or barred with blue grey, black, and white: the feathers of the back are black, edged with white, and those of the wing coverts and scapulars, blue grey, bordered with black near their margins, and edged with white: the quills black, edged a little way from the tips with blue grey: the under parts and tail coverts white: the thighs

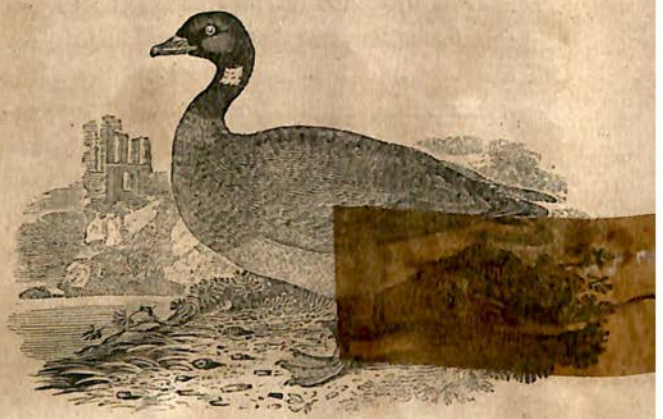
are marked with dusky lines or spots, and are black near the knees: the tail is black, and five inches and a half long: the legs and feet dusky, very thick and short, and have a stumpy appearance.

In severe winters, these birds are not uncommon in this kingdom, particularly on the northern and western parts, where, however, they remain only a short time, but depart early in the spring to their northern wilds, to breed and spend the summer.

The history of the Bernacle has been rendered remarkable by the marvellous accounts which were in former times related concerning their propagation, or rather their growth. Almost all the old naturalists, as well ornithologists as others, assert that they were produced from shells which grew out of rotten ship-wrecked timber, and other kinds of wood and trees which lay under water, in the sea, and that these shells owed their origin to "spume or froth," which, in a short time, assumed a fungous appearance upon the wood: others affirmed that they were produced from the palms or fruits of a tree like the willow, which, when ripe, dropped off into the water, and became alive, &c. Treatises were written expressly on these chimerical principles, giving a particular description of their first appearance, progressive growth, birth, (or final exclusion from the shell) and of their dropping into the sea, swimming about, and becoming perfectly feathered birds, &c. Other authors, indeed, less credulous, suspected the truth of these assertions: Belon was of the number of those who laughed at the story in his day; and Willoughby, long after him, treated such incoherent narratives with contempt. It must excite regret, that so respectable, so learned, and so grave

an author as Gerard, should not only have believed this wonderful transformation, but that he should have introduced the idle tale into his invaluable Herbal.* But even to enumerate these authors, or to quote the entertaining parts of the wild whimsies with which they have embellished their descriptions of these birds, would far exceed the limits of this work, and would only serve to prove (were that necessary) how credulous, not only the great unthinking mass, but even the philosophers, once were, and how far it was possible for such circumstantially told miracles to lay the understandings of mankind fast asleep. Bartholin discovered that these Goose-bearing conches contained only a shell-fish of a particular kind, a species of multivalve—the *Pousse-pieds* of Wormius and Lobel, and the *Lepas Anatifera* of Linnæus.

* See Gerard's Herbal, published in 1597, article—"The *Goose-tree*," which he seems to have reserved for the conclusion of his work, as being the most wonderful of all he had to describe. A small island called the Pile of Foulders, half a mile from the main land of Lancashire, he says, is the native soil of "*the Tree bearing Geese*," and so plentiful is the fruit, that a full-grown bird is sold for three-pence. The honest naturalist, however, although his belief was fixed, admits that his own personal knowledge was confined to certain shells which adhered to a rotten tree that he dragged from the sea between Dover and Romney, in some of which he found "liuing things without forme or shape; in others which were nearer come to ripenes, liuing things that were very naked, in shape like a birde: in others, the birds couered with soft downe, the shell halfe open, and the birde readie to fall out, which no doubt were the foules called Barnakles."



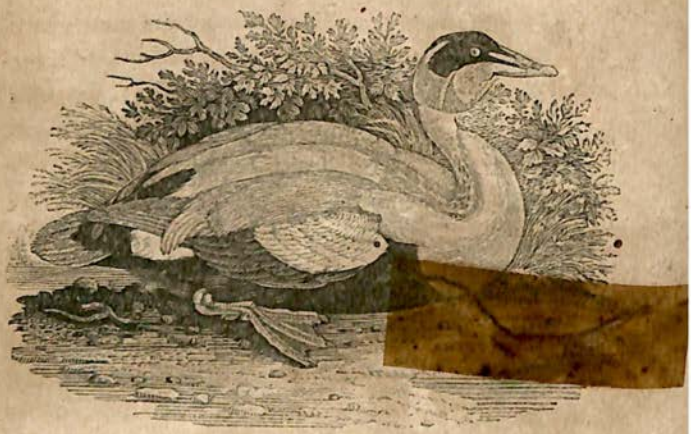
THE BRENT GOOSE.

(*Anas Bernicla*, Lin.—*Le Cravant*, Buff.)

This is of nearly the same shape, but somewhat less than the last, from which it differs in the colour of its plumage, being mostly of an uniform brown, the feathers edged with ash: the upper parts, breast and neck, are darker than the belly, which is more mixed and dappled with paler cinereous and grey: the head and upper half of the neck are black, excepting a white patch on each side of the latter, near the throat: the lower part of the back and the rump are also black: the tail coverts above and below, and the vent, white: tail, quills, and legs dusky: the bill is dark, rather of a narrow shape, and only about an inch and a half long: the irides are light hazel. In the females and the younger birds, the plumage is not so distinctly marked, and the white spots on the sides of the neck are often mixed with dusky: but such varyings are discernible in many other birds, for it seldom happens that two are found exactly alike.

The Brent Geese, like other species of the same genus, quit the rigours of the north in winter, and spread themselves southward in greater or less numbers, impelled forward, according to the severity of the season, in search of milder climates. They are then met with on the British shores, and spend the winter months in the rivers, lakes, and marshes in the interior parts, feeding mostly upon the roots, and also on the blades of the long coarse grasses and plants which grow in the water: but indeed their varied modes of living, as well as their other habits and propensities, and their migrations, haltings, breeding places, &c. do not differ materially from those of the other numerous families of the Wild Geese. Buffon gives a detail of the devastations which they made, in the hard winters of 1740 and 1765, upon the corn-fields, on the coasts of Picardy, in France, where they appeared in such immense swarms, that the people were literally raised (*en masse* we suppose) in order to attempt their extirpation, which, however, it seems they could not effect, and a change in the weather only, caused these unwelcome visitants to depart.

The Brent and the Bernacle were formerly, by some ornithologists, looked upon as being of the same species; later observers, however, have decided differently, and they are now classed as distinct kinds. The foregoing figure was drawn from one shot at Axwell-Park, near Newcastle upon Tyne. There was a stuffed specimen in the Wycliffe museum, which slightly varied in the markings of the plumage.



THE EIDER DUCK.

ST CUTHBERT'S DUCK, OR GREAT BLACK AND WHITE DUCK.

(*Anas mollissima*, Lin.—*L'Eider*, Buff.)

THIS wild, but valuable, species is of a size between the Goose and the Domestic Duck, and appears to be one of the graduated links of the chain which connects the two kinds. The full-grown old males generally measure about two feet two inches in length, and two feet eighteen in breadth, and weigh from six to above seven pounds. The head is large; the middle of the neck small, with the lower part of it spread out very broad, so as to form a hollow between the shoulders, which, while the bird is sitting at ease, seems as if fitted to receive its reclining head. The bill is of a dirty yellowish horn colour, darkish in the middle, and measures, from the tip to the corners of the mouth, two inches and a half: the upper mandible is forked in a singular manner towards each eye, and is covered with white feathers on the sides,

as far forward as the nostrils. The upper part of the head is of a soft velvet black, divided behind by a dull white stroke pointing downwards: the feathers, from the nape of the neck to the throat, are long, or puffed out, overhanging the upper part of the neck, and look as if they had been clipped off at the lower ends: they have the appearance of a pale pea-green velvet shag, with a white line dropping downward from the auriculars on each side. The cheeks, chin, upper part of the neck, the back, and lesser wing coverts, are white: the scapulars, and secondary quills, next the body, dirty white: bastard wings, and primary quills, brown; the secondaries and greater coverts are the same, but much darker: the lower broad part of the neck, on the front, to the breast, is of a buff colour; but in some specimens tinged with rusty red: the breast, belly, vent, rump, and tail coverts are of a deep sooty black: tail feathers hoary brown: legs short, and yellow: webs and nails dusky. The female is nearly of the same shape, though less than the male, weighing only between five and six pounds; but her plumage is quite different, the ground colour being of a reddish brown, prettily crossed with waved black lines; and in some specimens the neck, breast, and belly, are tinged with ash: the wings are crossed with two bars of white: quills dark: the neck is marked with longitudinal dusky streaks, and the belly is deep brown, spotted obscurely with black.

The Eider Duck lays from three to five large, smooth, pale olive-coloured eggs; these she deposits and conceals in a nest, or bed, made of a great quantity of the soft, warm, elastic down, plucked from her own breast, and sometimes from that of her mate. The ground work or

foundation of the nest is formed of bent-grass, sea-weeds, or such like coarse materials, and it is placed in as sheltered a spot as the bleak and solitary place can afford.

In Greenland, Iceland, Spitzbergen, Lapland, and some parts of the coasts of Norway, the Eiders flock together, in particular breeding places, in such numbers, and their nests are so close together, that a person in walking along can hardly avoid treading upon them. The natives of these cold climates eagerly watch the time when the first hatchings of the eggs are laid: of these they rob the nest, and also of the more important article, the down with which it is lined, which they carefully gather and carry off. These birds will afterwards strip themselves of their remaining down, and lay a second hatching, of which also they are sometimes robbed: but it is said, that when this cruel treatment is too often repeated, they leave the place, and return to it no more.*

* The following particulars, from Von Troil's Letters on Iceland, are given, on account of the singular trait of character which is mentioned—that of two females occupying only one nest:—

"The Eider birds build their nests on little islands not far from the shore, and sometimes even near the dwellings of the natives, who treat them with such kindness and circumspection as to make them quite tame. In the beginning of June they lay five or six eggs, and it is not unusual to find from ten to sixteen eggs in one nest, with two females, who agree remarkably well together. The whole time of laying continues six or seven weeks, during which time the natives visit the nest, for the purpose of taking the down and eggs, at least once a week. They first carefully remove the female, and then take away the down and part of the eggs; after which she lays afresh, covering her eggs with new down plucked from her breast: this being taken away, the male comes to her assistance, and covers the eggs with his down, which is left till the young are hatched. One female, during the whole time of laying, generally gives half a pound of down. The down from dead birds is accounted of little worth, having lost its elasticity. There are generally exported

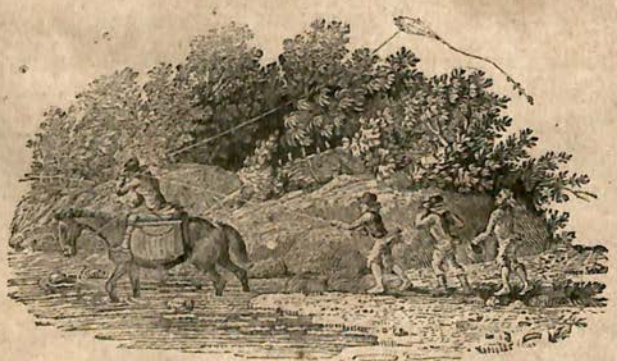
The quantity of this valuable commodity, which is thus annually collected in various parts, is uncertain. Buffon mentions one particular year, in which the Icelandic company sold as much as amounted to upwards of eight hundred and fifty pounds sterling. This, however, must be only a small portion of the produce, which is all sold by the hardy natives, to stuff the couches of the pampered citizens of more polished nations.

The great body of these birds constantly resides in the remote northern, frozen climates, the rigours of which their thick cloathing well enables them to bear. They are said to keep together in flocks in the open parts of the sea, fishing and diving very deep in quest of shell-fish and other food, with which the bottom is covered; and when they have satisfied themselves, they retire to the shore, whither they at all times repair for shelter, on the approach of a storm. Other less numerous flocks of the Eiders branch out, colonize, and breed further southward in both Europe and America: they are found on the promontories and numerous isles of the coast of Norway, and on those of the northern, and the Hebrides or western islands of Scotland, and also on the Fern Isles, on the Northumberland coast, which latter is the only place where they are known to breed in England, and may be

fifteen hundred or two thousand pounds of down on the company's account, exclusive of what is privately sold. The young ones quit the nest soon after they are hatched, and follow the female, who leads them to the water, where, having taken them on her back, she swims with them a few yards, and then dives, and leaves them floating on the water: in this situation they soon learn to take care of themselves, and are seldom afterwards seen on the land, but live among the rocks, and feed on insects and sea-weed."

said to be their utmost southern limit in this quarter, although a few solitary instances of single birds being shot further southward along the coast have sometimes happened. Mr Tunstall had a stuffed specimen in his museum, which was shot in January, at Hartlepool, on the Durham coast. The foregoing figure and description were taken from a perfect bird, in full plumage, shot in April, near Holy Island.

It is not known that any attempts to domesticate this species have succeeded. Such as were made by the Rev. Dr Thorp, of Ryton, entirely failed of success.



THE MUSK DUCK.

MUSCOVY, CAIRO, GUINEA, OR INDIAN DUCK.

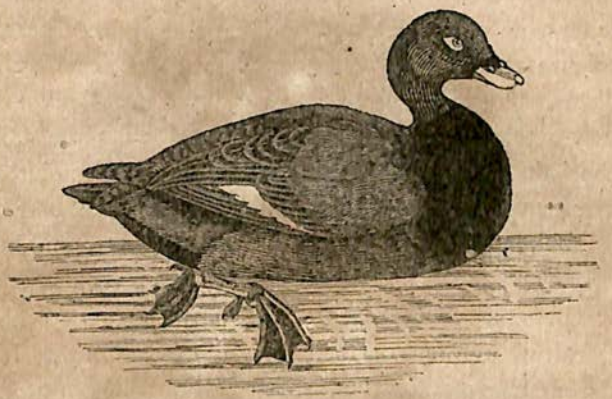
(Anas moschatus, Lin.—*Le Canard Musque*, Buff.*)*

This species is less than the last, but much larger than the Common Duck, measuring about two feet in length. The bill is two inches long; the tip and nostrils brown; the other parts of it red, as is also the naked warty skin which joins its base, and surrounds the eyes.

The crown of the head is rather tufted or crested, and black: the cheeks, throat, and fore part of the neck, white, irregularly marked with black: the belly, from the breast to the thighs, white. The general colour of the rest of the plumage is deep brown, darkest, and glossed with green on the back, rump, quills, and tail; the two outside feathers of the latter, and the first three of the quills, are white: the legs and feet are red, short, and thick. This is the general appearance of the Musk Duck; but as it is domesticated in almost every country, it varies very much, like all other birds in that state. In the female, the bare warty, or carunculated skin, which is spread from the bill over the eyes, is of a much duller red, and does not cover so large a portion of the head as it does in the male: she is also of a less size.

Ornithologists are in doubt as to the country to which these birds originally belonged; it is, however, agreed, that they are natives of the warm climates. Mr Pennant says they are met with, wild, about lake Baikal, in Asia; Ray, that they are natives of Louisiana; Marcgrave, that they are met with in Brazil; and Buffon, that they are found in the overflowed savannas of Guiana, where they feed in the day-time upon the wild rice, which grows

there in abundance, and return in the evening to the sea: he adds, "they nestle on the trunks of rotten trees; and after the young are hatched, the mother takes them one after another by the bill and throws them into the water." It is said that great numbers of the young brood are destroyed by the alligators, which are common in those parts. These birds have obtained the name of Musk Duck, from their musky smell, which arises from the liquor secreted in the glands on the rump. They are a thriving and prolific species, and their flesh, which is high-flavoured, is by many very much esteemed. They will associate with the Common Ducks; and instances are not wanting of their producing a mixed breed.



THE VELVET DUCK.

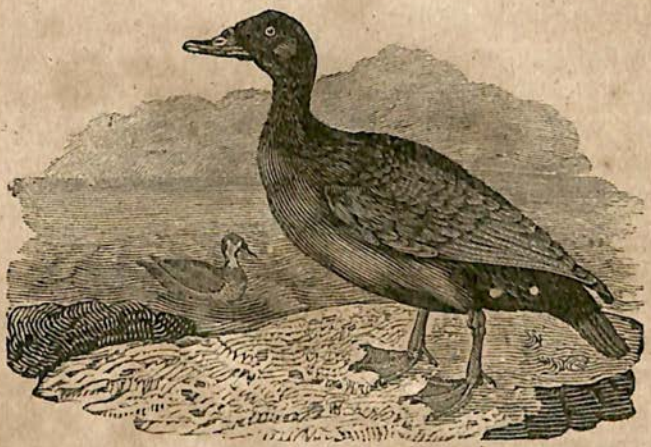
DOUBLE SCOTER, OR GREAT BLACK DUCK.

(*Anas fusca*, Lin.—*La grande Macreuse*, Buff.)

THE Velvet Duck is larger than a Mallard, weighing about three pounds two ounces, and measuring above twenty inches in length. The upper mandible is broad, and flat, and rises into a kind of black knob at the base: the nostrils are of the same colour, and stand out on each side; the middle, or ridge, and the nail, are red; the rest of it is orange yellow, edged with black. The under mandible is pale or yellowish white, edged and spotted with black, and tipped with deep yellow: both are coarsely serrated. The head is large, the eyes small, with a spot of white below each; and the irides are nearly of the same colour. All the rest of the plumage, excepting a white stroke or band which crosses the closed wings in an oblique direction, is of a soft smooth sooty black, glossed with a cast of purple on the head, upper part of the neck, and shoulders, and

inclining to brown on the sides, belly, and vent: the outer sides of the legs and toes are of a fine crimson colour; the inner sides deep yellow; the webs and nails black; and the joints of both legs and toes look as if they were stained or bespattered with ink: the tail, consisting of fourteen feathers, is short and pointed. The female is without the protuberance on the base of the bill, and has a white spot behind the ears, and her plumage is more inclined to brown.

These birds are natives of the northern parts of the world, where they rear their young, and continue during the summer months, but retire southward in winter, at which season they are met with in greater or less numbers, and according to the severity of the weather, approach towards the temperate climates of Europe, Asia, and America. In the latter quarter they are frequently seen as far south as New York, and spread themselves in small numbers along the shores of western Europe, as far as France, where they sometimes appear in company with the large flocks of Scoters, and are often caught in the fishermen's nets with those birds; but they are seldom met with on the British shores.



THE SCOTER.

BLACK DUCK, OR BLACK DIVER.

(*Anas Nigra*, Lin.—*La Macreuse*, Buff.)

THE Scoter is less than the Velvet Duck, weighing generally about two pounds nine ounces, and measuring twenty-two inches in length, and thirty-four in breadth. The base of the upper mandible is raised up into a kind of large knob, divided downwards in the middle by a narrow bright or deep yellow stripe, which is spread round the projecting edges of the nostrils, and extended nearly to the tip: the rest of the bill is black, grooved along near the edges, where it is broad and flat: the under mandible is also black: irides dusky. From the curious conformation and appearance of the bill, (of which a more accurate figure is subjoined) this species cannot easily be mistaken, although it is said that the knob in some specimens is red: in that of the females it is hardly noticeable; and in the younger males it is of a small size.

The eye-lids are yellow, the irides dark, and the whole of its close smooth plumage is black, glossed on the head and neck with purple. The tail consists of sixteen sharp-pointed feathers, of which the middle are the longest: legs brown. In some of the young females the plumage is grey.

In severe winters the Scoters leave the northern extremities of the world in immense flocks, dispersing themselves southward along the shores of more temperate climates. They are only sparingly scattered on the coasts of England; but according to Buffon, they appear in great numbers on the northern coasts of France, to which they are attracted by beds of a certain kind of small bivalve shell-fish, *(vaimeaux)* which abound in those parts, and of which they are very fond, for they are almost incessantly diving in quest of them. Over these beds of shell-fish, the fishermen at low water spread their long nets, floated or supported horizontally two or three feet from the sand: these they leave to be covered by the overflowing tide, which also brings the Scoters prowling along with it, within their accustomed distance from the beach. As soon as the first of them perceives the shells, it instantly dives, when all the rest follow the example, and numbers are entangled in the floating meshes of the net. In this way it is said that sometimes twenty or thirty dozen have been taken in a single tide. These birds are sold to the Roman catholics, who eat them on fast days and in lent, when their religious ordinances have forbidden the use of all animal food except fish; but these birds, and a few others of the same fishy flavour, have been exempted from the interdict, on the

supposition of their being cold blooded, and partaking of the nature of fish.

The Scoters seldom quit the sea, upon which they are very nimble, and are indefatigable expert divers; but they fly heavily, near the surface of the water, and to no great distance, and are said to walk awkwardly erect on the land.

THE MALLARD,

OR COMMON WILD DUCK.

(*Anas boschas*, Lin.—*Le Canard Sauvage*, Buff.)

THE Wild Drake weighs from thirty-six to forty ounces, and measures twenty-three inches in length, and thirty-five in breadth. The bill is of a yellowish green colour, not very flat, about an inch broad, and two and a half long, from the corners of the mouth to the tip of the nail: the head and upper half of the neck, are of a glossy deep changeable green, terminated in the middle of the neck by a white collar, with which it is nearly encircled: the lower part of the neck, the breast, and shoulders, are of a deep vinous chesnut: the covering scapular feathers are of a kind of silvery white; those underneath rufous; and both are prettily crossed with small waved threads of brown: wing coverts ash: quills brown; and between these intervenes the beauty-spot (common in the Duck tribe) which crosses the closed wing in a transverse oblique direction: it is of a rich glossy purple, with violet

or green reflections, and bordered by a double streak of black and white. The belly is of a pale grey, delicately penciled and crossed with numberless narrow waved dusky lines, which, on the sides and long feathers that reach over the thighs, are more strongly and distinctly marked: the upper and under tail-coverts, lower part of the back, and the rump, are black; the latter glossed with green: the four middle tail-feathers are also black, with purple reflections, and, like those of the Domestic Drake, are stiffly curled upwards; the rest are sharp-pointed, and fade off to the exterior sides, from a brown to a dull white; legs, toes, and webs red.

The plumage of the female is very different from that of the male, and partakes of none of his beauties except the spot on the wings. All the other parts are plain brown, marked with black. She makes her nest, lays from ten to sixteen greenish white eggs, and rears her young, generally in the most sequestered mosses or bogs, far from the haunts of man, and hidden from his sight among reeds and rushes. To her young helpless unfledged family, (and they are nearly three months before they can fly) she is a fond, attentive, and watchful parent, carrying or leading them from one pool to another, as her fears or inclinations direct her; and she is known in this country to use the same wily stratagems to mislead the sportsman and his dog, as those before noticed respecting the Partridge.*

Like the rest of the Duck tribes, the Mallards, in prodigious numbers, quit the north at the end of autumn, and migrating southward, arrive at the beginning of winter in large flocks, and spread themselves over all the

* Vol. I, page 306.

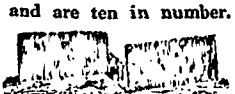
loughs and marshy wastes in the British Isles. They pair in the spring, when the greater part of them again retire northward to breed; but many straggling pairs stay with us: they, as well as preceding colonists of their tribes, remain to rear their young, who become natives, and continue with us throughout the year.

Many and various are the contrivances which have been used, in both ancient and modern times, to catch these wild, shy, and wary birds; and from the avidity with which the sport is still followed, it is hardly necessary to observe how highly they are esteemed, and what place they hold as a delicacy on the table. To describe these various contrivances would swell out this part of their history beyond its proper limits, and Willoughby, Buffon, Pennant, Latham, and others, have left little new to add on this head. It will not be proper, however, to omit noticing the decoy, which from its superiority over every other method, promises to continue long in use; for in that mode the Mallard and other Ducks are taken by thousands at a time; whereas all the other schemes, of lying in ambush, shooting, baited hooks, wading in the water with the head covered in a perforated wooden vessel, or in a calabash, &c.* are attended with much watching, toil, and fatigue, and are also comparatively trifling in point of success.

* This method of taking Wild Geese or Ducks is represented, as well as those anciently in use, of taking almost every kind of wild animals, in an old folio book, consisting of one hundred and five engravings, by Collaert and others, from the paintings of Johannes Stradanus. The wooden vessel which conceals the head of the fowler, is there represented, as it were floating about among the unsuspecting flocks, while with his hand the dextrous sportsman is pulling all those within his reach, one after another, by the legs under water. This method is still practised in China.

The decoys* now in use are formed by cutting *pipes* or tapering ditches, widened and deepened as they approach

* For the following account of the manner of taking Wild-fowl in decoys, this work is indebted to Mr Bonfellow, of Stockton, in Norfolk.

" In the lakes where they resort, the most favorite haunts of the fowl are observed: then in the most sequestered part of this haunt, they cut a ditch about four yards across at the entrance, and about fifty or sixty yards in length, decreasing gradually in width from the entrance to the farther end, which is not more than two feet wide. It is of a circular form, but not bending much for the first ten yards. The banks of the lake for about ten yards on each side of this ditch (or pipe, as it is called) are kept clear from reeds, coarse herbage, &c. in order that the fowl may get on them to sit and dress themselves. Across this ditch, poles on each side, close to the edge of the ditch, are driven into the ground, and the tops bent to each other and tied fast. These poles at the entrance form an arch, from the top of which to the water is about ten feet. This arch is made to decrease in height, as the ditch decreases in width, till the farther end is not more than eighteen inches in height. The poles are placed about six feet from each other, and connected together by poles laid lengthways across the arch and tied together. Over them a net with meshes sufficiently small to prevent the fowl getting through, is thrown across, and made fast to a reed fence at the entrance, and nine or ten yards up the ditch, and afterwards strongly pegged to the ground. At the farther end of the pipe, a tunnel net (as it is called) is fixed, about four yards in length, of a round form, and kept open by a number of hoops about eighteen inches in diameter, placed at a small distance from each other, to keep it distended. Supposing the circular bend of the pipe be to the right when you stand with your back to the lake, on the left hand side a number of reed fences are constructed, called *shootings*, for the purpose of screening from sight the *decoy-man*, and in such a manner, that the fowl in the decoy may not be alarmed, while he is driving those in the pipe: these shootings are about four yards in length, and about six feet high, and are ten in number. They are placed in the following manner—  From the end of the last shooting, a person cannot see the lake, owing to the bend of the pipe: there is then no farther occasion for shelter. Were it not for those

the water, in various semicircular directions through the swampy ground, into particular large pools, which are

shootings, the fowl that remain about the mouth of the pipe would be alarmed, (if the person driving the fowl already under the net should be exposed) and would become so shy as to forsake the place entirely. The first thing the decoy-man does when he approaches the pipe, is to take a piece of lighted turf or peat and hold near his mouth, to prevent the fowl smelling him. He is attended by a dog taught for the purpose of assisting him: he walks very silently about half-way up the shootings, where a small piece of wood is thrust through the reed fence, which makes an aperture just sufficient to see if any fowl are in: if not, he walks forward to see if any are about the mouth of the pipe. If there are, he stops and makes a motion to his dog, and gives him a piece of cheese or something to eat; upon receiving it he goes directly to a hole through the reed fence, (No. 1.) and the fowl immediately fly off the bank into the water; the dog returns along the bank between the reed fences and the pipe, and comes out to his master at the hole (No. 2.) The man now gives him another reward, and he repeats his round again, till the fowl are attracted by the motions of the dog, and follow him into the mouth of the pipe. This operation is called working them. The man now retreats farther back, working the dog at different holes till the fowl are sufficiently under the net: he now commands his dog to lay down still behind the fence, and goes forward to the end of the pipe next the lake, where he takes off his hat and gives it a wave between the shooting; all the fowl under the net can see him, but none that are in the lake can. The fowl that are in sight fly forward; and the man runs forward to the next shooting and waves his hat, and so on, driving them along till they come to the tunnel net, where they creep in: when they are all in, he gives the net a twist so as to prevent their getting back: he then takes the net off from the end of the pipe with what fowl he may have caught, and takes them out one at a time and dislocates their necks, and hangs the net on again; and all is ready for working again.

" In this manner five or six dozen have been taken at one drift. When the wind blows directly in or out of the pipe, the fowl seldom work well, especially when it blows in. If many pipes are made in a lake, they should be so constructed as to suit different winds.

" Duck and Mallard are taken from August to June. Teal or

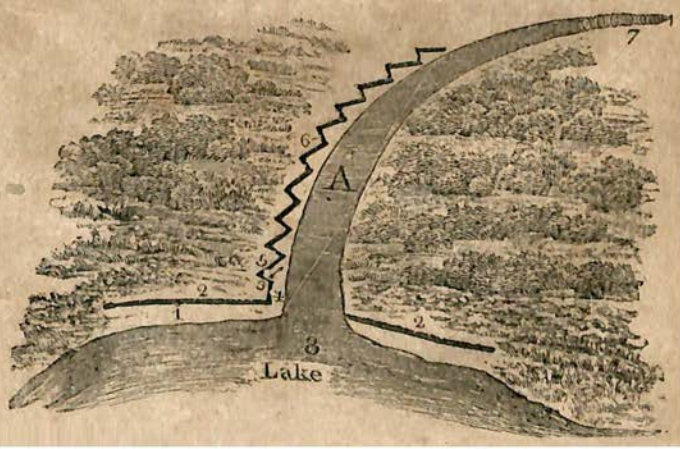
sheltered by surrounding trees or bushes, and situated commonly in the midst of the solitary marsh. At the narrow points of these ditches, farthest from the pool, by which they are filled with water, the fowlers place their *funnel* nets: from these the ditch is covered by a continued arch of netting, supported by hoops, to the

Wigeon, from October to March. Becks, Smee, Golden Eyes, Arps, Cricks, and Pintails or Sea Pheasants, in March and April.

"Pocker Ducks are seldom taken, on account of their diving and getting back in the pipe."

REFERENCES TO THE CUT.

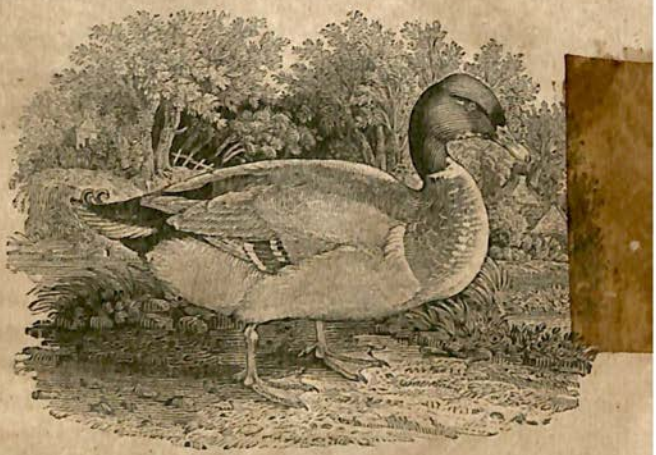
No. 1. Dog's hole, where he goes to unbank the fowl.
2. Reed fences on each side of the mouth of the pipe.
3. Where the decoy-man shews himself to the fowl first, and afterwards at the end of every shooting.
4. Small reed fence to prevent the fowl seeing the dog when he goes to unbank them.
5. The shootings.
6. Dog's holes between the shootings, used when working.
7. Tunnel net at the end of the pipe.
8. Mouth of the pipe.



desired distance; and all along both sides, skreens formed of reeds are set up so as to prevent the possibility of the birds seeing the decoy-man; and as these birds feed during the night, all is ready prepared for this sport in the evening. The fowler, then, placed on the leeward side, sometimes with the help of his well-trained dog, but always by that of his better trained tame Decoy-Ducks, begins the business of destruction. The latter directed by his well-known whistle, or excited forward by the floating hempseed, which he strews occasionally upon the water, entice all the Wild Ducks after them under the netting; and as soon as this is observed, the man or his dog, as the fitness of opportunity may direct, is from the rear exposed to the view of the birds, by which they are so alarmed that they dare not offer to return, and are prevented by the nets from escaping upwards: they therefore press forward in the utmost confusion to the end of the *pipe*, into the *funnel* or *purse* nets there prepared to receive them, while their treacherous guides remain behind in conscious security. The season allowed by act of parliament for catching these birds in this way, continues only from the latter end of October till February.

Particular spots or decoys, in the fen countries, are let to the fowlers at a rent of from five to thirty pounds per annum; and Pennant instances a season in which thirty-one thousand two hundred Ducks, including Teals and Wigeons, were sold in London only, from ten of these decoys near Wainfleet, in Lincolnshire. Formerly, according to Willoughby, the Ducks, while in moult and unable to fly, were driven by men in boats, furnished with long poles, with which they splashed the

water between long nets, stretched vertically across the pools, in the shape of two sides of a triangle, into lesser nets placed at the point; and in this way, he says, four thousand were taken at one driving in Deeping-Fen; and Latham has quoted an instance of two thousand six hundred and forty-six being taken in two days, near Spalding, in Lincolnshire: but this manner of catching them while in moult is now prohibited.



THE TAME DUCK.

(*Anas domestica*, Lin.—*Le Canard domestique*, Buff.)

This valuable domestic owes it origin to the Mallard, the last-described species, but has long been reclaimed from a state of nature. Many of them appear in nearly the same plumage as the wild ones; others vary greatly from them, as well as from each other, and may be said to be marked with almost all colours; but all the males (Drakes) still retain the unvarying mark of their wild original, in the curled feathers of the tail. Long domestication has, however, deprived the Tame Duck of that keen, quick, and sprightly look and shape which distinguish the Mallard, and substituted a more dull and less elegant form and appearance in their stead. In the wild state they pair, and are monogamous, but become polygamous when tame.

The Count de Buffon, whose lively and ingenious flights of imagination are peculiar to himself, says,

"Man made a double conquest when he subdued inhabitants at once of the air and of the water. Free in both these vast elements, equally fitted to roam in the regions of the atmosphere, to glide through the ocean or plunge under its billows, the aquatic birds seemed destined by nature to live for ever remote from our society, and from the limits of our dominion." "Eggs taken from the reeds and rushes amidst the water, and set under an adopted mother, first produced, in our farm-yards, wild, shy, fugitive birds, perpetually roving and unsettled, and impatient to regain the abodes of liberty." These, however, after they had bred and reared their own young in the domestic asylum, became attached to the spot; and their descendants in process of time, grew more and more gentle and tractable, till at last they appear to have nearly relinquished and forgotten the prerogatives of the savage state, although they still retain a strong propensity to roam abroad, in search, no doubt, of the larger pools, marshy places, and bogs, which it is natural to suppose they must prefer to the beaten, hard, pebbly-covered surface surrounding the scantily watered hamlet: and indeed it is well known to every observing good housewife, that where they are long confined to such dry places, they degenerate in both strength and beauty, and lose much of the fine flavour of those which are reared in spots more congenial to their nature. That these, and such like watery places, which their health requires for them to wash, dive, feed, rest, and sport in, are not better tenanted by these useful and pretty birds, is much to be regretted, and marks strongly a falling off—a want of industry* in those females to whose lot it falls, and

* "The thrifty huswife is aye weel kend by her sonsy swarms o'bonny chucky burdies." *Scotch Proverb.*

whose duty it is to contribute their quota of attention to these lesser but not uninteresting branches of rural economy. Were this done, and ponds made in aid of the purpose, in every suitable contiguous situation, there can be no doubt but that a multiplied stock of Ducklings, to an inconceivable amount, might be annually reared, with a comparatively trifling additional expence; for the various undistinguishable animal and vegetable substances upon which they chiefly live, and for which they unceasingly search with their curiously constructed bills, sifting and separating every alimentary particle from the mud, unless fed upon by them, are totally lost. When older, they also devour worms, spawn, water insects, and sometimes frogs and small fishes, together with the various seeds of bog and water plants, of which they find an abundant supply when left to provide for themselves in those wet places.

When they, with other kinds of fowl, are busily employed in picking up the waste about the barn door, they greatly enliven and beautify the rural scene.

> "A snug thack house, before the door a green;
> "Hens on the midding, ducks in dubs are seen:
> "On this side stands a barn, on that a byre;
> "A peat-stack joins, and forms a rural square."*

To this may be added the no less pleasing peep at the mill and mill-dam, when well furnished with these their feathered inhabitants. The village school-boy witnesses with delight the antic movements of the busy shapeless little brood, sometimes under the charge of a foster mother, who with anxious fears paddles by the brink, and

* Allan Ramsay.

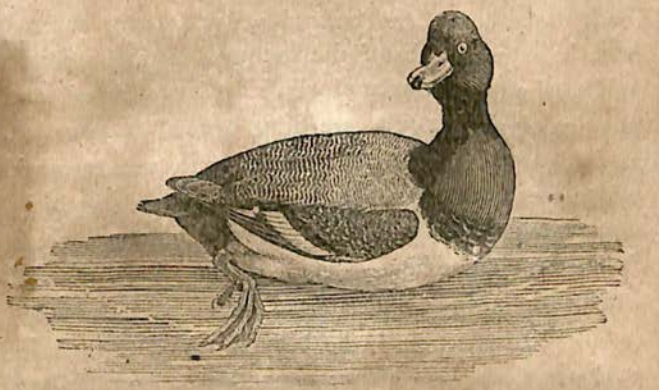
utters her unavailing cries, while the Ducklings, regardless of her warnings, and rejoicing in the element so well adapted to their nature, are splashing over each other beneath the pendent foliage; or, in eager pursuit, snap at their insect prey on the surface, or plunge after them to the bottom: some meanwhile are seen perpendicularly suspended, with the tail only above water, engaged in the general search after food.

Scenes like these, harmonized by the clack of the mill and its murmuring water-fall, afford pleasures little known to those who have always been engaged in mere worldly pursuits: but such picturesque beauties pass not unnoticed by the young naturalist; their charms invite his first attentions, and probably bias his inclinations to pursue studies which enlarge and exalt his mind, and can only end with his life.

THE HOOK-BILLED DUCK.

(*Anas adunca*, Lin.—*Le Canard à bec courbé*, Brisson.)

THE bill of this differs from that of the Mallard and of the Tame Duck, in being broader, longer, and in bending more downwards; but as this bird is of the same species, so in other respects it nearly resembles them, and this variation of the bill is probably only one of those accidental sportings of nature, not very uncommon in all domestic animals; every variety of which, each with its original peculiarities, (for like begets like) may easily be kept up as long as caprice shall feel gratified by continuing them. Latham says these birds seem only to be kept in England out of curiosity, but that according to the information he received, they are full as common in Germany as the other sort of Tame Ducks. He also mentions other varieties of the Mallard. Those with copped heads, others wanting the webs of their feet, &c. if added to the list, would only serve to mislead the young enquirer; and to the experienced ornithologist such details are unnecessary.



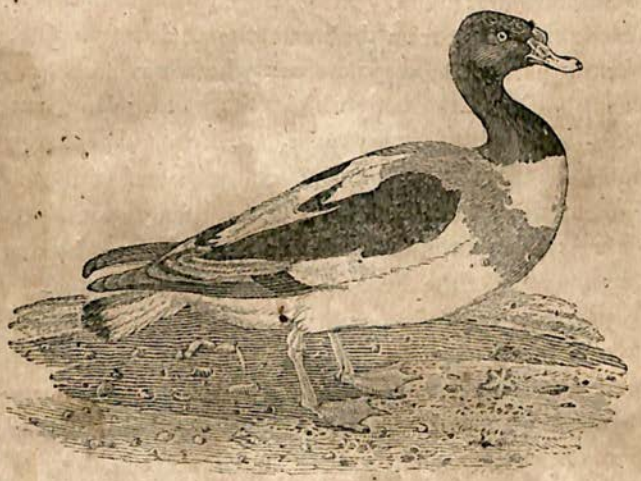
THE SCAUP DUCK.

(Anas Marila, Lin.*)*

This species is less than the Mallard; some of them, it is said, weighing only a pound and a half, while others exceed that weight by eight or nine ounces, and measure, when stretched out, nearly twenty inches in length, and thirty-two in breadth. The bill is broad and flat, more than two inches long, from the corners of the mouth to the tip, and of a fine pale blue or lead colour, with the nail black: irides bright deep yellow: the head and upper half of the neck are black, glossed with green: the lower part of the latter, and the breast, are of a sleek plain black: the throat, rump, upper and under coverts of the tail, and part of the thighs, are of the same colour, but dull, and more inclining to brown. The tail, when spread out, is fan-shaped, and consists of fourteen short brown feathers: the back, scapulars, wing coverts, and tertials, are varied from white to deeper shades of pale ash, and ash brown, and are prettily marked with

delicately freckled, or more distinctly penciled transverse dark waved lines: the bastard wings, greater coverts, and the exterior webs of the first two or three primary quills, (the interior webs of which are brownish ash) and the tips of all the rest, are deep brown, more or less sprinkled with white, and crossed with narrow waved white lines: some of the primary quills towards the body, are white; the bases of the secondaries, of the same colour, form an oblique bar across the wings, which is stopped by a single under tertial feather, of plain brown, with green reflections: the belly is white, and shaded off towards the vent with the same kind of sprinkled and waved lines as those so predominant on a large portion of the plumage. The legs are short; toes long, and, as well as the outer or lateral webs of the inner toes, are of a dirty pale blue colour; all the joints and the rest of the webs are dusky. These birds are said to vary greatly in their plumage, as well as size, but those which have come under the author's observation were all nearly alike.

The Scaup Duck, like others of the same genus, quits the rigours of the dreary north in the winter months, and in that season only is met with, in small numbers, on various parts of the British shores.



THE SHIELDRAKE.

SHELDRAKE, SKELDRAKE, OR BURROUGH DUCK.

(Anas tadorna, Lin.—*La Tadorne.)*

The male of this prettily marked species is somewhat larger than the Mallard, measuring about two feet in length, three and a half in breadth, and weighing commonly two pounds ten ounces. The bill is red, with the nail and nostrils black: the upper mandible is broad, flat, and grooved on the edges towards the point, where it has rather a cast upwards; it is also depressed in the middle, and raised into a knob or tubercle at the base. The head, and upper part of the neck, are of a glossy dark or bottle green: the lower part of the neck, to the breast, is encircled with white, and joined by a broad band of bright orange bay, which is spread over, and covers the breast and shoulders. The back, wing coverts, rump, upper tail coverts, and sides of the belly to the vent, and

tail, are white: a dusky stripe, tinged with rufous, runs along the middle from the breast, the whole length of the belly: [part of the scapulars next the wings are black, and those next the body white: the bastard wing, and some of the first primary quills, are black; the exterior webs of the next adjoining ones are glossed with gold green, which forms the speculum or beauty spot of the wings: this spot is bounded, and partly covered by the orange webs of the three succeeding quill feathers, which separate it from the scapulars. The tail is white, but some of its feathers are tipped with black: the legs pale red. The female is less than the male, and her plumage is not so vivid and beautiful. She makes her nest, and rears her young, under ground, in the rabbit-holes which are made in the sand-hills near the sea-shore: it is chiefly formed of the fine down plucked from her own breast: she lays from twelve to sixteen roundish white eggs, and the incubation lasts about thirty days. During this time, the male, who is very attentive to his charge, keeps watch in the day-time on some adjoining hillock, where he can see all around him, and which he quits only when impelled by hunger, to procure subsistence. The female also leaves the nest, for the same purpose, in the mornings and evenings, at which times the male takes his turn and supplies her place. As soon as the young are hatched, or are able to waddle along, they are conducted, and sometimes carried in the bill, by the parents, to the full tide, upon which they launch without fear, and are not seen afterwards out of tide-mark until they are well able to fly: lulled by the roarings of the flood, they find themselves at home amidst an ample store of their natural food, which consists of sand-hoppers, sea-worms, &c.

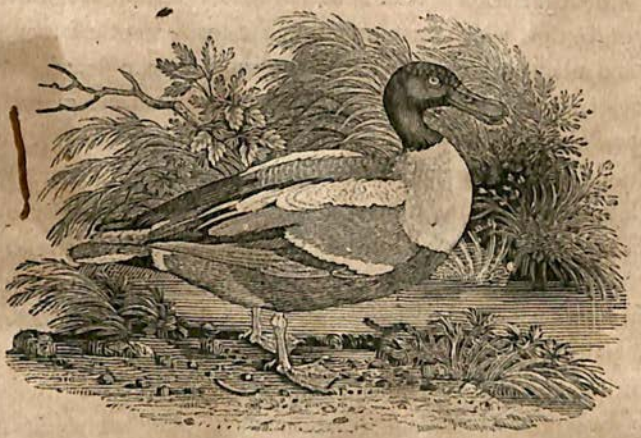
or small shell fish, and the innumerable shoals of the little fry, which have not yet ventured out into the great deep, but are left on the beach, or tossed to the surface of the water by the restless surge.

If this family, in their progress from the nest to the sea, happen to be interrupted by any person, the young ones, it is said, seek the first shelter, and squat close down, and the parent birds fly off: then commences that truly curious scene, dictated by an instinct analogous to reason, the same as has been already noticed in the Mallard and the Partridge: the tender mother drops, at no great distance from her helpless brood, trails herself along the ground, flaps it with her wings, and appears to struggle as if she were wounded, in order to attract attention, and tempt a pursuit after her. Should these wily schemes, in which she is also aided by her mate, succeed, they both return when the danger is over, to their terrified motionless little offspring, to renew the tender offices of cherishing and protecting them.

These birds are sometimes watched to their holes, which are dug up to the nest, whence the eggs are taken, and hatched, and the young reared by a Tame Duck. In this way many gentlemen, tempted by the richness of their garb, have their ponds stocked with these beautiful birds; but as they are of a roving disposition, and are apt to stray, or to quit altogether such limited spots, it is generally found necessary to pinion or disable a wing to secure them. The Shieldrake has been known to breed with the Common Duck; but it is not well ascertained whether the hybrids thus produced will breed again or not.

This species is dispersed, in greater or less numbers,

over the warm, as well as the cold climates, in various parts of the world: they are met with as far north as Iceland in the spring, and in Sweden and the Orkney Islands in the winter. Captain Cook notices them, among other sea-fowl, on the coast of Van Diemen's Land, and they have been seen, in great numbers, at the Falkland Islands. Although they are not numerous on the British and the opposite shores, yet they are common enough in the British Isles, where they remain throughout the year, always in pairs, and occasionally straggle away from the sea coast to the lakes inland.



THE SHOVELER.

BLUE-WING SHOVELER, KERTLUTOCK, OR BROAD-BILL.

(Anas clypeata, Lin.—*Le Souchet*, Buff.)

THE Shoveler is less than the Wild Duck, commonly weighing about twenty-two ounces, and measuring twenty-one inches in length. The bill is black, three inches long, very broad or spread out, and rounded like a spoon at the end, with the nail hooked inward and small: the insides of the mandibles are remarkably well furnished with thin pectinated rows, which fit into each other like a weaver's brake, and through which no dirt can pass, while the bird is separating or sifting the small worms and insects from amongst the mud, by the edges of the water, where it is continually searching for them: the irides are of a fine pure yellow; the head and upper half of the neck of a dark glossy changeable green: the lower part of the neck, the breast, and scapulars, white: the back is brown: belly and sides chesnut bay, and the

wing coverts of a fine pale sky-blue, terminated with white tips, which form an oblique stripe across the wings, and an upper border to the beauty spot, or spangle, which is of a glossy changeable bronze, or resplendent green, and also divides or crosses the wings in the same direction: the greater quills and the tail are dusky, but in the latter the outside feathers, and the edges of some of the adjoining ones, are white: a ring of white also encircles the rump and the vent, behind which the feathers under the tail are black: legs and feet red. The female is smaller than the male, from which she also differs greatly in the colours of her plumage, the coverts and spangle spot on her wings being less brilliant, and the other parts, composed of white, grey, and rusty, crossed with curved dusky lines, giving her much the appearance of the Common Wild Duck. She makes her nest, lined with withered grasses, on the ground, in the midst of the largest tufts of rushes or coarse herbage, in the most inaccessible part of the slaky marsh: she lays ten or twelve pale rusty-coloured eggs; and as soon as the young are hatched, they are conducted to the water by the parent birds, who watch and guard them with the greatest care. They are at first very shapeless and ugly, for the bill is then almost as broad as the body, and seems too great a weight for the little bird to carry. Their plumage does not acquire its full colours until after the second moult.

It would appear, from the varied descriptions of ornithologists, that these birds differ much from each other, both in the colour of the bill, and in the disposition of the markings of their rich-coloured plumage. All, however, agree in ranking the Shoveler among the most beautiful of the Duck tribe; and it is also, in the opinion

of many, inferior to none of them in the delicate flavour of its flesh, which is red, juicy, and tender.

It has not yet been ascertained whether the Shoveler breeds in England, where indeed it is a scarce bird; but according to M. Baillon,* they are not uncommon in France, where they arrive about the month of February, disperse in the marshes, and a part of them hatch every year. He conjectures that they advance southward, for they are seldom met with after the first northerly wind that blows in March, and he adds, that those of them which then stay behind do not depart till September. He also remarks that hardly any are ever seen during the winter, from which he concludes that they shun the approach of cold. They are said to be met with in Scania and Gothland, and in most parts of Germany, Russia, and Kamtschatka; and also, in the winter months, in New York and Carolina, in America.

This species is of so wild, shy, and solitary a disposition, that all attempts hitherto made to domesticate them have failed. This work was favoured with the bird from which the foregoing figure and description were taken, by the author's friends at Cambridge.

The *Anas muscaria* of Linnæus (*Le Souchet à ventre blanc* of Brisson) differs only from this in having the belly white, and is considered merely as a variety of the same species.

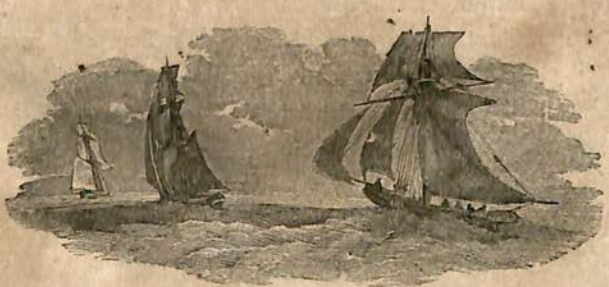
* The friend and correspondent of the Count de Buffon.

THE RED-BREASTED SHOVELER.

"Size of a Common Duck. Bill large, serrated on the sides, and entirely of a brownish yellow colour: head large: eyes small: irides yellow: breast and throat of a reddish brown: back brown, growing paler towards the sides: the tips and pinions of the wings grey: quills brown; the rest of a greyish brown: the speculum, or wing spot, purple, edged with white: tail short, and white: vent of a bright brown, spotted with darker: legs short and slender: feet small, and of a reddish brown colour."

"In the female all the colours are fainter, and the speculum of the wings blue."

"This species is sometimes taken in the decoys of Lincolnshire."



THE GADWALL,

OR GRAY.

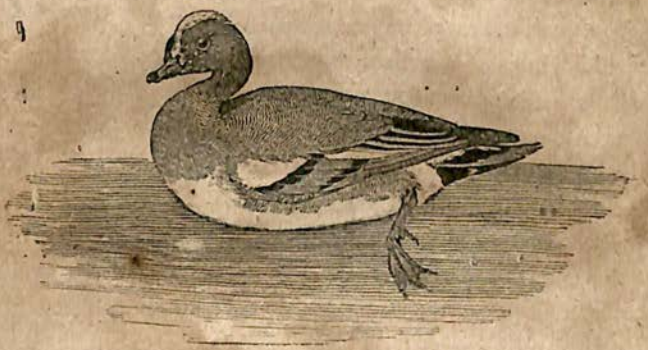
(Anas strepera, Lin.—*Le Chipeau,* Buff.)

The Gadwall is less than the Mallard, measuring about nineteen inches in length, and twenty-three in breadth. The bill is flat, black, and two inches long, from the tip to the corners of the mouth: the head, and upper part of the neck, are of a rufous brown colour, lightest on the throat and cheeks, and finely speckled and dotted all over with black and brown: the feathers on the lower part of the neck, breast, and shoulders, look like scales, beautifully margined and crossed with curved black and white lines: those of the back, scapulars, and sides, are brown, marked transversely with narrower waved streaks of a dusky colour: the belly and thighs are dingy white, more or less sprinkled with grey: the lower part of the back dark brown: rump and vent black; and the tail ash, edged with white. The ridge and lesser coverts of the wing are of a pale rufous brown, crossed obliquely by the beauty spot, which is a tri-coloured bar of purplish red, white, and black: the greater quills are dusky: legs orange red. The wings of the female are barred like those of the male, but the colours are of a much duller cast, and her breast, instead of his beautiful markings, is only plain brown, spotted with black.

Birds of this species breed in the desert marshes of the north, and remain there throughout the spring and summer. On the approach of winter they leave the European and Siberian parts of Russia, Sweden, &c. and aided by the first strong north-east wind, commonly make their appearance about the month of November, on the

French, British, and other more southern shores, where they remain till the end of February, and then return to their northern haunts. They are very shy and wary birds, feeding only in the night, and lurking concealed among the rushes in the watery waste during the day, in which they are seldom seen on the wing.

These birds shew themselves expert in diving as well as in swimming, and often disappoint the sportsman in his aim; for the instant they see the flash of the pan, they disappear, and dive to a distant secure retreat.



THE WIGEON.

WHEWER, WHIM, OR PANDLED WHEW.

(*Anas Penelope*, Lin.—*Le Canard siffleur*, Buff.)

THIS is nearly of the same size as the Gadwall, weighing generally about twenty-three ounces, and measuring nearly twenty inches in length, and two feet three in breadth. The bill is an inch and a half long, narrow, and serrated on the inner edges: the upper mandible is of a dark lead colour, tipped with black. The crown of the head, which is very high and narrow, is of a cream colour, with a small spot of the same under each eye: the rest of the head, the neck, and the breast, are bright rufous chesnut, obscurely freckled on the head with black spots, and darkest on the chin and throat, which are tinged with a vinous colour: a band, composed of beautifully waved, or indented narrow ash brown and white lines, separates the breast and neck; the back and scapulars are marked with similar feathers, as are also the sides of the body under the wings, even as low as the thighs, but there they are paler: the belly to the vent is

white: the ridge of the wing, and adjoining coverts, are dusky ash brown: the greater coverts brown, edged with white, (in some specimens wholly white) and tipped with black, which forms an upper border to the changeable green beauty-spot of the wings, which is also bordered on the under side by another stripe formed by the deep velvet black tips of the secondary quills: the exterior webs of the adjoining quills are white, and those next the back, which are very long, are of a deep brown, (in some specimens deep black) edged with yellowish white: the greater quills are brown; the vent and upper tail coverts, black. The tail, which consists of fourteen feathers, is of a hoary brownish ash, edged with yellowish white; the two middle ones are sharp-pointed, darker and longer than the rest. The legs and toes are of a dirty lead colour, faintly tinged with green; the middle of the webs and nails black. "The female is brown, the middle of the feathers deepest: the fore part of the neck and breast paler: scapulars dark brown, with paler edges: wings and belly as in the male." The young of both sexes are grey, and continue in that plain garb till the month of February, after which a change takes place, and the plumage of the male begins to assume its rich colourings, in which, it is said, he continues till the end of July, and then again the feathers become dark and grey, so that he is hardly to be distinguished from the female.*

These birds quit the desert morasses of the north on the approach of winter, and as they advance towards the

* M. Baillon, from whom these remarks are taken, adds, that the same changes happen to the Pintail, the Gadwall, and the Shoveler, and that they are also all grey when young.

end of their destined southern journey, they spread themselves along the shores, and over the marshes and lakes in various parts of the continent, as well as those of the British Isles; and it is said that some of the flocks advance as far south as Egypt. They remain in these parts during the winter, at the end of which the old birds pair, and the whole tribe, in full plumage, take their departure northward about the end of March. While they remain with us, they frequent the same places, and feed in the same mode as the Mallard, and are often taken in the decoys along with them and other kinds of Ducks.

The Wigeons commonly fly, in small flocks, during the night, and may be known from others by their whistling note while they are on the wing. They are easily domesticated in places where there is plenty of water, and are much admired for their beauty, sprightly look, and busy frolicsome manners.

THE BIMACULATED DUCK.

CLUCKING DUCK.

(Anas Glocitans.)

"LENGTH twenty inches. Bill deep lead colour; nail black: irides brown: crown brown, changeable with green, ending in a streak of brown at the hinder part of the head, with a small crest: between the bill and eye, and behind each ear, ferruginous spots, the first round, the last oblong and large: throat of a fine deep purple: the rest of the head bright green, continued in streaks down the neck: breast a light ferruginous brown, spotted with black: hind part of the neck and back dark brown, waved with black: wing coverts ash coloured; lower coverts streaked with rust colour: scapulars cinereous: quills the same, inclined to brown: secondaries fine green, ending in a shade of black, edged with white: tail coverts deep changeable green: twelve feathers in the tail; the two middlemost black, the others brown, edged with white: belly dusky, finely granulated: legs small, yellow: webs dusky." "Taken in a decoy in England. Has been met with along the Lena, and about the Lake Baikal. Has a singular note, somewhat like clucking." *Latham.*

THE POCHARD.

POKER, DUNBIRD, OR GREAT-HEADED WIGEON.

(*Anas ferina*, Lin.—*Penelope, le Millouin*, Buff.)

THE Pochard is nineteen inches in length, and two feet and a half in breadth, and weighs about one pound thirteen ounces. The bill is of a dark lead colour, with the tip and sides near the nostrils, black: irides fine deep yellow. The head and neck are of a glossy chesnut, joined to a large space of sooty black which covers the breast, and is spread over the shoulders: the lower part of the back, the rump, tail coverts, and vent, are also black: the rest of the plumage, both above and below, is wholly covered with prettily freckled slender dusky threads, disposed transversely in close-set zigzag lines, on a pale ground, more or less shaded off with ash and brown, and deepest on the wing coverts. The primary quills are brown, with dusky tips; the secondaries lead colour, tinged with brown, and slightly tipped with dull white. The tail consists of twelve short feathers, of a dark brownish ash, which have also a hoary grey appearance:

the legs and toes are lead colour, shaded and dashed with black.

This species is without the beauty-spot on the wing, and has altogether a more plain and half-mourning kind of look than others of this tribe. The specimen from which the above figure was drawn, was shot at Axwell-Park, in the county of Durham: the description was taken from one shot in January, near Holy-Island. The former differed from the latter in wanting the black on the rump and vent, and in some other slight variations in the shadings of its colours.

"The head of the female is of a pale reddish brown: the breast is of rather a deeper colour: the coverts of the wings plain ash colour: the back marked like that of the male: the belly ash coloured."*

These birds leave the north on the approach of winter, and migrate southward as far, it is said, as Egypt, in Africa, and Carolina and Louisiana, in America. They arrive in the marshes of France about the end of October, in tolerably numerous flocks; and considerable numbers of them are caught in the fens of Lincolnshire during the winter season, and sold in the London markets, where they and the female Wigeons are indiscriminately called Dunbirds, and are esteemed excellent eating. It has not yet been discovered whether any of them remain to breed in England.

The Pochard is of a plump round shape, and its walk is heavy, ungraceful and waddling; but when on the wing, they fly with greater rapidity than the Mallard, and in flocks of from twenty to forty, commonly in a close compact body, whereby they may be easily distinguished

* Pennant.

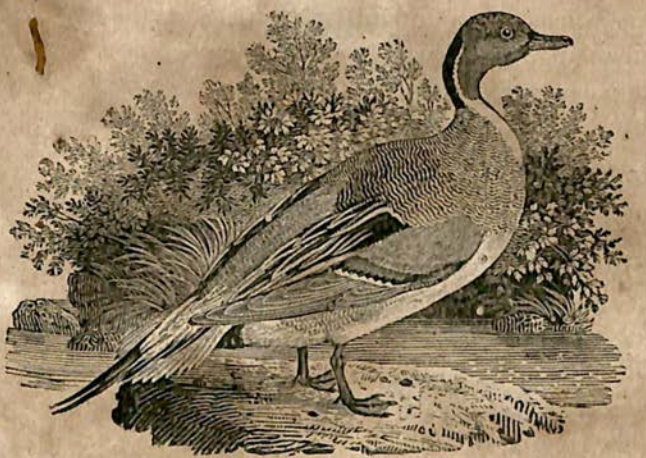
rom the triangular shaped flocks of the Wild Duck, as well as by the difference of the noise of their wings.

The few attempts which have been hitherto made to domesticate this species have failed of success. They do pretty well where they have plenty of water, but it is said that they cannot bear walking about on hard pebbly grounds.

THE FERRUGINOUS DUCK.

Anas Rutila.

"WEIGHT twenty ounces. The bill long, and flatted, rounded a little at the base, serrated along the edges of each mandible, and furnished with a nail at the end of the upper; colour pale blue: head, neck, and whole upper part of the bird, an agreeable reddish brown: throat, breast, and belly, the same colour, but paler: the legs of a pale blue: webs black." "One of this species was killed in Lincolnshire. Found in the Swedish rivers, but rarely. Mr Pennant has also received it from Denmark." *Latham.*



THE PINTAIL DUCK.

SEA PHEASANT, CRACKER, OR WINTER DUCK.

(*Anas acuta*, Lin.—*Le Canard à longue queue*, Buff.)

THIS handsome-looking bird is twenty-eight inches in length, and thirty-eight in breadth, and weighs about twenty-four ounces. The bill is rather long, black in the middle, and blue on the edges: the irides reddish: the head and throat are of a rusty brown, mottled with small dark spots, and tinged behind the ears with purple: the nape and upper part of the neck are dusky, margined by a narrow white line, which runs down on each side, and falling into a broader stripe of the same colour, extends itself on the fore part as far as the breast; the rest of the neck, the breast, and the upper part of the back, are elegantly penciled with black and white waved lines: the lower back and sides of the body are undulated in the same manner, but with lines more

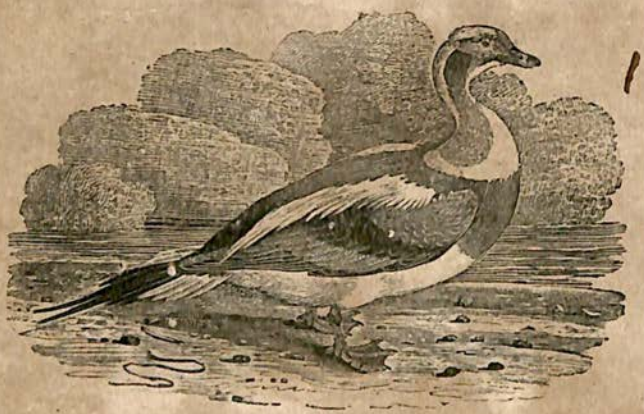
freckled, less distinct, and paler: the scapulars are long and pointed, each feather black down the middle, with white edges: the coverts of the wings are ash brown, tipped with dull orange: below these the wing is obliquely crossed by the beauty-spot of glossy bronze purple green, with a lower border of black and white: this spangle is formed by the outer webs and tips of the middle quills: the rest of the quills are dusky. All the tail feathers are of a brown ash colour, with pale edges, except the two middle ones, which are black, slightly glossed with green, considerably longer than the others, and end in a point: the belly and sides of the vent are white:* under tail coverts black: legs and feet small, and of a lead colour. The female is less than the male, and her plumage is of a much plainer cast, all the upper parts being brown, with each feather margined more or less with white, inclining to red or yellow: the greater coverts and secondary quills are tipped with cream colour and white, which form a bar across the wings. The fore part of the neck, the breast, and the belly, to the vent, are of a dull white, obscurely spotted with brown. The tail is long and pointed, but the two middle feathers do not extend themselves beyond the rest, like those of the male.

These birds do not visit the temperate and warm climates in great numbers, except in very severe winters, the great bulk of them dropping short, and remaining during that season in various parts of the Russian dominions, Sweden, Norway, &c. and also in the same latitudes in both Asia and America. They are seldom numerous in England, but flocks of them are sometimes

* In some, the belly and fore part of the neck are of a reddish buff or cream colour.

abundantly spread along the isles and shores of Scotland and Ireland, and on the interior lakes of both those countries, as well as those of the continent, as far south as Italy, and in America, as far south as New York. They are esteemed excellent eating.

The Pintail Duck is of a taller or more lengthened shape than any of the other species, and in the opinion of the Count de Buffon, seems to form the link between the Duck and the Garganey.



THE LONG-TAILED DUCK,

OR SWALLOW-TAILED SHELDRAKE.

(*Anas Glacialis*, Lin.—*Canard de Miclon*, Buff.)

THIS species is considerably less than the last, and comes more nearly to the size of the Wigeon. The bill is short, black, and crossed by an orange red bar between the tip and the nostrils, with both mandibles deeply pectinated on the edges. The front of the head, the cheeks, and the sides of the neck, are pale reddish brown, with an oval-shaped black and chesnut patch, placed on the sides behind the auriculars; the rest of the head and neck is white: the breast, shoulders, back, and lesser wing coverts, are of a deep chocolate colour, more or less inclining to black or brown in different birds: the greater coverts and primary quills dusky; the secondaries are reddish brown, and form an oblique bar of that colour across the wings: the belly, vent, and scapulars are white; the feathers of the latter long, narrow, and sharp pointed: the two middle or long feathers

of the tail, and one on each side of them, are black: the rest white. The legs and toes are pale blue: webs and nails black: the inner toes and the small ones behind are margined by small lateral webs.

This species is described as varying in the different shades of their plumage. In some the spots on the sides of the upper part of the neck are much larger and darker, and the two tail feathers are double the length of those of others: their legs are also said to be sometimes of deeper or lighter shades of red.

The Long-tailed Ducks, it is said, do not in the winter, like many of the other tribes, entirely quit their native haunts in the northern extremities of the world, but considerable numbers remain there, enduring its gloomy rigours, as well as enjoying the perpetual day, under the influence of the unsetting summer's sun, during the rest of the thus divided year. Numerous flocks, however, spread themselves southward in the winter, from Greenland and Hudson's Bay, as far as New York in America; and from Iceland and Spitzbergen, over Lapland, the Russian dominions, Sweden, Norway, and the northern parts of the British Isles, in Europe. The same progress of them is observed in Asia, where they are met with about Kamtschatka, &c. They frequent the lakes in the interior of all those parts, as well as the sea shores. The flocks which visit the Orkney Isles appear in October, and continue there till April; and "about sun-set they are seen in vast companies going to and returning from the bays, in which they frequently pass the night, making such a noise, as in frosty weather may be heard some miles." They are rather scarce in England, whither they come only in very hard winters, and even

then but in small straggling parties. They fly swiftly, but seldom to a great distance, making a loud and singular cry. They are expert divers, and are supposed to live chiefly upon shell-fish.

The female, it is said, makes her nest among the grass near the water, lined, like that of the Eider Duck, with her own equally valuable down. Her eggs are of a bluish white colour, about the size of those of a Pullet. Latham says she lays five; others assert that the number is "seldom fewer than ten, and often as many as fourteen or fifteen." Some are of opinion that the latter number may be the produce of two females, as is said to be the case with the Eider Duck. When the young are hatched, the mother carries them to the water in her bill.

Latham describes the *Anas hyemalis* of Linnæus as the female of this species: he says the bill is the same: "sides of the head white; hind head cinereous; the rest of the head, the neck, breast, and back, dusky black: the lower part of the breast and scapulars chesnut: belly white: upper tail coverts and wings, much as in the *male*: legs dusky reddish brown." "Some birds of this sex have the brown feathers edged with ferruginous, others not." "I have likewise observed in some a white spot on each side of the lower part of the neck." He adds, that in the females which he had seen, the long tail feathers were wanting.

THE GOLDEN-EYE.

(*Anas clangula*, Lin.—*Le Garrot*, Buff.)

THE weight of this species varies from twenty-six ounces to two pounds. The length is nineteen inches, and the breadth thirty-one. The bill is bluish black, short, thick, and elevated at the base: the head large, slightly crested, and black, or rather of a glossy bottle green, with violet reflections: a large white spot is placed on the space on each side between the corners of the mouth and the eyes, the irides of which are of a golden yellow: the throat, and a small portion of the upper part of the neck, are of a sooty or velvet black; the lower, to the shoulders, the breast, belly, and vent, white; but some of the side feathers, and those which cover the thighs, are tipped with black: the scapulars white and deep black: of the latter colour are also the adjoining long tertial feathers, and those on the greater part of the back: the first fourteen primary quills, with all the outside edge of the wing, including the ridge and a portion of the coverts, are brownish black: the middle part of

the wing is white, crossed by a narrow black stripe, which is formed by the tips of the lesser coverts: tail dark hoary brown: legs short, of a reddish yellow colour, with the webs dusky: the inner and hinder toes are furnished with lateral webs: on the latter these webs are large and flapped. Willoughby says "the windpipe hath a labyrinth at the divarication, and besides, above swells out into a belly or puff-like cavity."

This is the description of an individual adult male, in which, as to the identity of the sex and species, no one can be mistaken: but as younger males have been met with, bearing in every respect the same plumage as the old ones, except in having no white spots before the eyes, and other (supposed) young males have also been seen both with and without those white spots, though with a female-looking garb, and their bills tipped with orange, like that of the Morillon; it is not only uncertain at what age the Golden-eye attains his full dress, but also, from the varied appearances, as well in these, as in those supposed to be females, it is doubtful whether two distinct species are not confounded in one, and the young of one species described as the old of another. Willoughby describes two species; the one, the "smaller reddish-headed Duck," which he at last supposes to be the female Golden-eye,—and the other the "greater reddish-headed Duck," "perchance the same as the last described, or the male thereof." Latham confesses himself equally at a loss with Willoughby; and as some of the correspondents of the author are of one opinion, and some of another, in respect to the sex, as well as the species of these birds, he forbears giving descriptions from other specimens, although accurately taken, because

they would not remove the doubts already entertained, or elucidate the subject. It may not be improper, however, to quote Mr Pennant's account of the female Golden-eye in this place, and that of the Morillon, sent to this work by C orge Strickland, Esq. of Ripon, in the subsequent account of the latter bird. "The head of the female is of a deep brown, tinged with red: the neck grey: breast and belly white: coverts and scapulars dusky and ash coloured: middle quill feathers white; the others, together with the tail, black: the legs dusky.* These birds frequent the fresh water, as well as the sea, being found on the Shropshire meres during winter."†

These birds do not congregate in large flocks, nor are they numerous on the British shores, or on the lakes in the interior. They are late in taking their departure northward in the spring, the specimens before mentioned being shot in April. In their flight they make the air whistle with the vigorous quick strokes of their wings; they are excellent divers, and seldom set foot on the shore, upon which, it is said, they walk with great apparent difficulty, and, except in the breeding season, only repair to it for the purpose of taking their repose.

The attempts which were made by M. Baillon to domesticate these birds, he informs the Count de Buffon, quite failed of success.

* A bird was sent to the author by the Rev. J. Davies, of Trinity College, Cambridge, agreeing with this description, except in the legs being yellow.

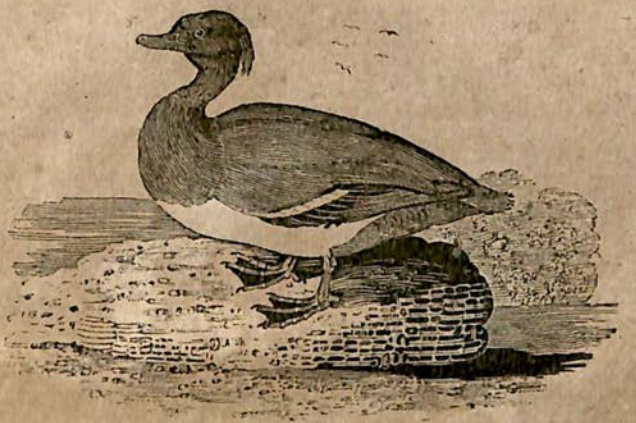
† Pennant.

THE MORILLON.

(*Anas Glaucion*, Lin.—*Le Morillon*, Buff.)

"BILL brown, orange from the nostrils to the point, the knob of which is black; it is an inch and a half long, rather narrow towards the apex; the nostrils are placed very forward: head brown, cheeks tinged with black: irides straw colour: a broad white circle round the neck, the back part of which is mottled with brown: breast, sides of the body, and scapular feathers, white, barred with black: belly white: thighs and vent feathers brown and white: inner coverts of the wings brown: back and coverts of the wings black, mottled with white: quill feathers and tertials black; secondaries white: tail rounded, and grey: legs and toes yellow brown, with a greenish tinge; webs and claws black. Length one foot four inches; breadth two feet four inches; weight one pound seven ounces."

"The above is a description of the male bird: the female has not the white circle round the neck, or the yellow on the bill, and has less white on the wings." "I have shot this species on Coniston lake, and on Eastwaite water, Lancashire, in December,—on Duddon-sands, Cumberland, in April,—and on a pond near Ripon, Yorkshire, in October. They are generally seen in small flocks, diving for their food, near the shore."—*Mr Strickland.*



THE TUFTED DUCK.

(*Anas fuligula*, Lin.—*Le petit Morillon*, Brisson.)

This is a plump, round, and short-shaped species. The male is distinguished by a pendent crest, overhanging the nape of the neck, two inches in length. The weight is about two pounds, length eighteen inches. The bill is broad, of a dark lead colour; the nail black: irides deep orange: the head is black, glossed with purple: the neck, breast, and all the upper parts, are of a deep brown or black; the scapulars faintly powdered or sprinkled with light spots, so minute as not to be observed at a short distance. The wings are crossed by a narrow white bar: the belly, sides, and under coverts of the wings, are of a pure white: the vent white, mixed with dusky. The tail consists of fourteen very short feathers: the legs are of a dark lead colour; webs black. The female is of a browner colour than the male, and has no crest.

The habits, manners, and haunts of this species are much the same as those of the Golden-eye, and they return northward about the same time. Latham says "the French allow these birds to be eaten on maigre days, and in lent; as they do also the Scoter: but though the flesh of the latter is now and then tolerable, that of the Tufted Duck is seldom otherwise than excellent."

THE GARGANEY.

(*Anas querquedula*, Lin.—*La Sarcelle*, Buff.)

This species, which is only a little bigger than the Teal, is cloathed with an elegant plumage, and has altogether a most agreeable and sprightly look. It measures about seventeen inches in length, and twenty-eight in breadth. The bill is of a dark lead colour, nearly black: the irides light hazel. From the crown of the head, over the nape of the neck downwards, it is of a glossy brown: chin black: brow, cheeks, and the upper fore part of the neck, reddish chesnut, with vinous reflections, and sprinkled all over with numerous small pointed white lines. A white stripe passes over each eye, and slanting backwards, falls down on each side of the neck, the lower part of which, with the breast, is light brown, pretty closely crossed with semicircular bars of black: the shoulders and back are marked nearly the same, but on a darker ground: the scapulars are long and narrow, and are striped with ash colour, black and white. The belly, in some, is white, in others pale reddish yellow; the

lower part of it, and the vent, mottled with dusky spots: the sides are freckled and waved with narrow lines of ash coloured brown, more and more distinctly marked towards the thighs, behind which this series of feathers terminates in a ribband striped with ash, black, white, and lead-coloured blue. The coverts of the wings are of an agreeable bluish ash, margined with white: next to this the exterior webs of the middle quills are glossy green, tipped with white, and form the beauty-spot or spangle of the wings, to which the white tips make a border: the primary quills are ash brown, edged with white: tail dusky: legs lead colour.—The foregoing figure and description were taken from a male bird in full and perfect plumage. This sex is furnished with a labyrinth.

"The female has an obscure white mark over each eye; the rest of the plumage is of a brownish ash colour, not unlike the female Teal; but the wing wants the green spot, which sufficiently distinguishes these birds."

It has not yet been noticed whether any of this species ever remain to breed in England, where indeed they are rather a scarce bird.

THE TEAL,

OR COMMON TEAL.

(Anas crecca, Lin.—*La petite Sarcelle.)*

This beautiful little Duck seldom exceeds eleven ounces in weight, or measures more, stretched out, than fourteen inches and a half in length, and twenty-three and a half in breadth. The bill is a dark lead colour, tipped with black: irides pale hazel: a glossy bottle-green patch, edged on the upper side with pale brown, and beneath with cream-coloured white, covers each eye, and extends to the nape of the neck: the rest of the head,* and the upper part of the neck, are of a deep reddish chesnut, darkest on the forehead, and freckled on the chin and about the eyes with cream-coloured spots: the hinder part of the neck, the shoulders, part of the scapulars, sides under the wings, and lower belly, towards the vent, are elegantly pencilled with black, ash-brown, and

* In some of this species the feathers on the head are lengthened out into a crest; the upper part of which is pale brown, the under deep purple.

white transverse waved lines: the breast, greatly resembling the beautifully spotted appearance of an India shell, is of a pale brown or reddish yellow, and each feather is tipped with a roundish heart-shaped black spot: the belly is a cream-coloured white: back and rump ash brown, each feather freckled and edged with a paler colour: vent black: the primary quills, lesser and greater coverts, are brown; the last deeply tipped with white, which forms a bar across the wings: the first six of the secondary quills are of a fine velvet black; those next to them, towards the scapulars, are of a most resplendent glossy green, and both are tipped with white, forming the divided black and green bar, or beauty-spot of the wings. The tail consists of fourteen feathers, of a hoary brown colour, with pale edges: the legs and feet are of a dirty lead colour. The female, which is less than the male, is prettily freckled about the head and neck with brown and white. She has not the green patch behind the eyes, but a brown streak there, which extends itself to the nape of the neck. the crown of the head is dark brown: the upper mandible yellow on the edges, olive green on the sides, and olive brown on the ridge; nail black, and the under bill yellow: breast, belly, and vent glossy yellowish white, spotted on the latter parts with brown: the upper plumage is dark brown, each feather bordered with rusty brown, and edged with grey: the wings and legs nearly the same as those of the male.

The Teal is common in England in the winter months, but it is uncertain whether or not they remain throughout the year to breed,* as is the case in France. The

* Dr Heysham says "the Teal is now known to breed in the mosses about Carlisle."

female makes a large nest, composed of soft dried grasses, (and, it is said, the pith of rushes) lined with feathers, and cunningly concealed in a hole among the roots of reeds and bulrushes, near the edge of the water; and some assert that it rests on the surface of the water so as to rise and fall with it. The eggs are of the size of those of a Pigeon, six or seven in number, and of a dull white colour, marked with small brownish spots; but it appears that they sometimes lay ten or twelve eggs, for Buffon remarks that that number of young are seen in clusters on the pools, feeding on cresses, wild chervil, &c. and no doubt, as they grow up, they feed, like other Ducks, on the various seeds, grasses, and water plants, as well as upon the smaller animated beings with which all stagnant waters are so abundantly stored. The Teal is highly esteemed for the excellent flavour of its flesh.

OF THE PELICAN.

THE bill of this genus is long and straight; the end either hooked or sloping; the nostrils placed in a furrow that runs along the sides of the bill, and in most of the species not distinguishable. The face generally destitute of feathers, being covered only with a bare skin: gullet naked, and capable of great distention: body long, heavy, and flat: legs placed far backward: toes four in number, and all webbed together.

Latham, following the example of Linnæus, includes the Pelican, Man of War bird, Corvorant, Shag, Gannet, and Booby, in this genus, of which he enumerates thirty distinct species and two varieties: four only of this number, and one variety, are British Birds. In confining the present account to these, it is proper to remark, that they are not the inhabitants of this country only, but are widely dispersed over the globe, being met with in almost every climate which navigators have visited, whether temperate, hot, or cold. The Gannet only is migratory: large flocks of this species arrive in the spring of the year, and disperse themselves in colonies over the rocky promontories of Scotland and its isles, in various parts of which they breed and rear their young; and as soon as that office is performed, they retire in the autumn to their unknown abodes. Their return each season points out also that of the shoals of the herring, which they hover over, pursue, and chiefly feed upon. These shoals, at that season of increasing warmth, are poured forth on their southern route, gliding forward in wide glittering columns of myriads upon myriads, from the unknown but prolific regions of the northern pole.

These prodigious shoals, with their divisions and subdivisions, in their branched course around the British Isles, are attended by the Gannet. On our southern coasts the Pilchard affords these birds another supply of food, in pursuit of which they are enticed as far southward as the Mediterranean sea.

The Corvorant and the Shag remain with us throughout the year, but particularly on our more northern shores, upon whose rocky shelving precipices they station themselves, and perform the offices of incubation; while stragglers occasionally taking a wider range, with outstretched neck and vigorous wing, sweep along the coast, and entering the mouths of the rivers, follow their course in quest of food, to the lakes inland.

THE CORVORANT.

COLE GOOSE, OR GREAT BLACK CORMORANT.

(*Pelicanus Carbo*, Lin.—*Le Cormoran*, Buff.)

The weight of this species varies from four to seven pounds, and the size from thirty-two inches to three feet four or five in length, and from four feet to four feet six inches in breadth. The bill, to the corners of the mouth, measures four inches, and on its ridge two and three quarters: it is of a dark horn colour, and the tip or nail of the upper bill is much hooked and sharp: from the base of this it is furrowed on each side nearly to the tip,

without any visible appearance of nostrils: the lower bill is compressed, and covered about the gape of the mouth with a naked yellowish skin, extended under the chin and throat, where it hangs loose, and forms a kind of pouch, which, together with the springing blades on each side, forming its rim, is capable of distention to a great width, and enables the bird to swallow prey apparently too large to be admitted into its throat: the skin about the eyes is also naked, and of the same colour as the pouch: the eyes, which have a remarkably wild stare, and are placed near the bill, look like two little greenish glass globes. The crown of the head, and the neck, are black: on the hinder part of the former the feathers appear elongated, and form a sort of loose short crest. In some specimens the throat is white, with a kind of stripe passing from it upwards behind each eye; in others the cheeks and throat are mixed with brown and white; and again, in others the head and neck are streaked with scratches of the latter colour: the middle of the belly is white, with a patch of the same colour over each thigh: all the under parts, however, together with the back and rump, are commonly of a glossy blue black, with green reflections: the shoulders, scapulars, and wing coverts are of a bronze brown, tinged and glossed with green, and each feather is bordered with shining bluish black: the secondary quills are nearly of the same colour: the coverts and the primaries are dusky. The tail consists of fourteen stiff *hasky* dark feathers, which look as if they were discoloured by being dipped in mud or dirty kennel water, and dried again: the legs are thick, strong, black, and coarse, about two inches and a half long, and the outer toe is more than four in length.

The Corvorant, as before observed, is found in every climate. In Greenland, where it is said they remain throughout the year, the jugular pouch is made use of by the natives as a bladder to float their fishing darts, after they are thrown: their skins, which are tough, are used for garments, and their flesh for food; "but the eggs are too fetid to be eaten even by the Greenlanders."*

These birds usually assemble in flocks on the summits and inaccessible parts of the rocks which overhang, or are surrounded by the sea, upon which the female makes her nest of the withered sea-tang, weeds, sticks, and grasses, which are cast on shore by the waves: she lays four or more greenish white eggs, of the size of those of a Goose, but of a longer shape. There are writers who assert that, in some parts of the world they build their nests on trees, like the Rook and the Heron; other authors, stricken with the singular conformation of the feet† and serrated claw, have ascribed properties to them which they do not possess, and believe that they hold their prey in one foot, while with the other they push forward to the shore, or carry it thither, in the same manner, on the wing: but this seems mere conjecture, for the feet of this tribe are not fitted for any such purpose; they are, like those of all the expert divers, placed far behind; and while by the position of these, and the powerful strokes from their broad webs, the bird is enabled to pursue and overtake its slippery prey, the hooked sharp-edged beak is the only fit instrument both to catch and to secure it; and there is no need to use the awkward expedient of removing it afterwards to the foot.

* Arctic Zoology. This must surely mean the rotten eggs.

† See the cut in the Explanation of Technical Terms, vol. 1, page xxxiv.

At sea, or on the inland lakes, they make terrible havoc. From the greatest height they drop down upon the object of pursuit, dive after it with the rapidity of a dart, and with an almost unerring certainty, seize the victim; then emerging, with the fish across the bill, with a kind of twirl, throw it up into the air, and, dexterously catching it head foremost, swallow it whole.

While at rest on the shore, commonly on the ledge of a projecting rock, these birds sit more or less in an erect posture, and are propped up by the stiff feathers of the tail; and in places where they have not experienced the fatal effects of the gun, they have been known, however wary at other times, to sit and receive repeated shots, without offering to remove out of the danger.* At other times and places, while they sit in a dozing and stupified state, from the effects of one of their customary surfeits, they may easily be taken by throwing nets over them, or by putting a noose around their necks, which they avoid no further than by slipping the head from side to side as long as they can.

Notwithstanding the natural wildness of their disposition, it seems, according to some accounts, that certain species of these birds have formerly been tamed and

* Dr Heysham relates that, about the year 1759, one of these birds "perched upon the castle at Carlisle, and soon afterwards removed to the cathedral, where it was shot at upwards of twenty times without effect: at length a person got upon the cathedral, fired at, and killed it." "In another instance, a flock of fifteen or twenty perched, at the dusk of evening, in a tree on the banks of the river Esk, near Netherby, the seat of Sir James Graham. A person who saw them settle, fired at random at them in the dark six or seven times, without either killing any or frightening them away: surprised at this, he came again, at day light, and killed one; whereupon the rest took flight."

rendered subservient to the purposes of man, both in this and in other countries. Among the Chinese, it is said, they have frequently been trained to fish, and that some fishermen keep many of them for that purpose, by which they gain a livelihood. "A ring, placed round the neck, hinders the bird from swallowing; its natural appetite joins with the will of its master, and it instantly dives at the word of command; when unable to gorge down the fish it has taken, it returns to the keeper, who secures it to himself. Sometimes, if the fish be too big for one to manage, two will act in concert, one taking it by the head and the other by the tail."* In England, according to Willoughby,† they were hood-winked in the manner of the Falcons, till they were let off to fish, and a leather thong was tied round the lower part of their necks, to prevent them swallowing the fish. Whitlock tells us "that he had a cast of them *manned* like Hawks,

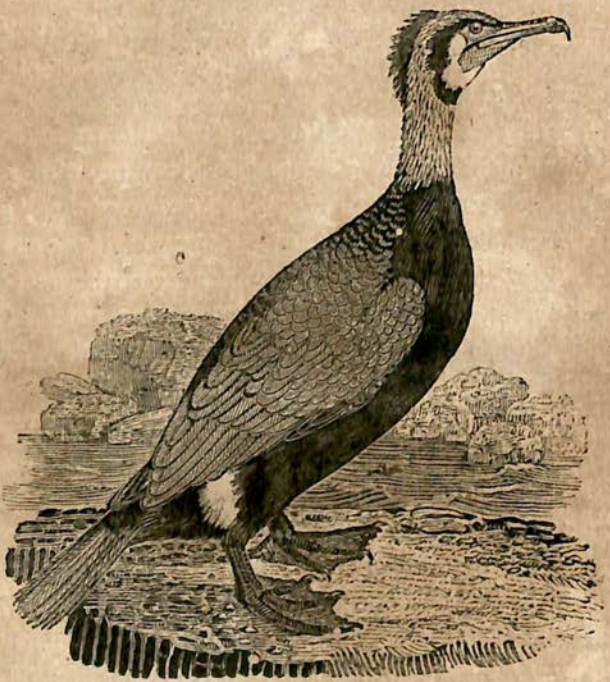
* Latham.

† "When they come to the rivers, they take off their hoods, and having tied a leather thong round the lower part of their necks, that they may not swallow down the fish they catch, they throw them into the river. They presently dive under water, and there for a time, with wonderful swiftness, they pursue the fish, and when they have caught them, they arise presently to the top of the water, and pressing the fish lightly with their bills, they swallow them, till each bird hath in this manner swallowed five or six fishes; then their keepers call them to the fist, to which they readily fly, and, little by little, one after another, vomit up all their fish, a little bruised with the nip they gave them with their bills. When they have done fishing, setting the birds on some high place, they loose the string from their necks, leaving the passage to the stomach free and open, and for their reward they throw them part of the prey they have caught, to each, perchance, one or two fishes, which they by the way, as they are falling in the air, will catch most dexterously in their mouths." —*Willoughby.*

which would come to hand." He took much pleasure in them, and relates, that the best he had was one presented to him by Mr. Wood, Master of the Corvorants to Charles I.

This tribe seems possessed of energies not of an ordinary kind; they are of a stern sullen character, with a remarkably keen penetrating eye, and a vigorous body; and their whole deportment carries along with it the appearance of the wary circumspect plunderer, the unrelenting tyrant, and the greedy insatiate glutton, rendered lazy only when the appetite is palled, and then they sit puffing forth the fetid fumes of a gorged stomach, vented occasionally in the disagreeable croakings of their hoarse hollow voice. Such is their portrait, such the character generally given of them by ornithologists; and Milton seems to have put the finishing hand to it, by making Satan personate the Corvorant, while he surveys, undelighted, the beauties of Paradise.* It ought, however, to be observed, that this bird, like other animals, led only by the cravings of appetite, and directed by instinct, fills the place and pursues the course assigned to it by nature.

* Paradise Lost, Book iv. l. 194—198.



THE CRESTED CORVORANT.

The crest is black, and longer than that of the Great Black Corvorant: the crown of the head, and nearly the whole neck, are streaked downwards with scratches of white and dusky: a white gorget hangs from the cheeks, and covers the chin; this is bounded behind by a broadish black fillet, which partly covers the auriculars, and is extended to the corner of each eye: a patch of white feathers covers the hinder part of each thigh: the rest of its plumage is the same as that of the preceding species; it character is also similar.

It is not yet clearly ascertained whether this is a variety of the last, or a distinct species, or whether it is the Corvorant in the garb of its highest adult state. Latham inclines to the latter opinion, and supposes the streaked head and different markings of its plumage to be acquired only by age. Buffon, in his *Planches Enluminées*, has given its figure as the Corvorant; and Pennant, differing from them, makes it a species of the Shag. Mr Tunstall was in doubt on this subject, but discovered, by dissection, that the whiteness under the chin and on the thighs is not confined to the males, for one with these marks, which was sent to him out of Holderness, in Yorkshire, in 1775, was full of eggs. The above figure was taken from the specimen in his museum.

THE SHAG.

SKART, SCARFE, OR GREEN CORMORANT.

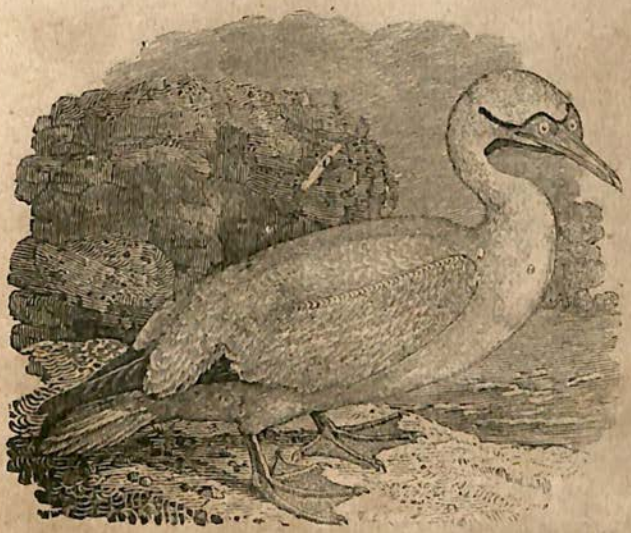
(Pelicanus graculus, Lin.—*Le petit Cormoran, ou le Nigaud*, Buff.)

The form, the aspect altogether, the outward conformation of all the parts, the character, manners and habits, and the places of abode, of this species, are nearly like those of the Corvorant; but they do not associate, and these make their nests on the rugged shelvy sides and crevices of the rocky precipices or projecting cliffs which overhang the sea, while the others make theirs on the summits above them; and these are at once distinguished from the others by the greenness of the upper, and brownness of the under plumage, and also in being of a much less size; the largest Shags weighing only

about four pounds, and measuring nearly two feet six inches in length, and three feet eight in breadth. The bill is of a more slender make, but nearly as long as that of the Corvorant; the head, in the male, is crested in the same manner; the middle claw is serrated; and its tail, consisting of twelve stiff feathers stained with green, is also of the same form and hoary or dirty appearance as that of the Corvorant: the crown of the head, hinder part of the neck, lower back, and rump, are of a plain black, or very dark green, shining like satin: the upper back, or shoulders, together with the scapulars and wings, are nearly of the same colour, but with a tinge of bronze brown, and each feather is distinctly edged with purple glossed black: the under parts are clouded with dusky dirty white and brown.

The Shag is as greedy and voracious as the Corvorant, and, like that bird, after having over-gorged its stomach, is often found on shore in a sleepy or stupified state; but when this torpor is over, and they appear again upon the water, they are then extremely alert, and are not easily shot, for both kinds dive the instant they see the flash of the gun, and take care afterwards to keep out of its reach. In swimming they carry their head very erect, while the body seems nearly submerged, and from their feathers not being quite impervious to the water, they do not remain very long upon it at a time, but are frequently seen flying about, or sitting on the shore, flapping the moisture from their wings, or keeping them for some time expanded to dry in the sun and the wind. Notwithstanding the strong and offensive smell emitted from the Shags and the Corvorants, some instances are not wanting of their having been eaten by

people in this country; but before they are cooked, they must undergo a certain sweetening process, part of which consists in their being first skinned and drawn, and then wrapped up in a clean cloth, and buried for some time in the earth; after which they are made ready for eating in various ways, though generally potted like Moor Game.



THE GANNET,

GAN, SOLAND OR SOLAN GOOSE.

(*Pelicanus bassanus*, Lin.—*Le Fou de Bassan*, Buff.)

THE Gannet is generally about seven pounds in weight, three feet in length, and six in breadth. The bill is of a pale or lead-coloured blue, six inches long, a little jagged on the edges, strong and straight to the tip, which is inclined a little downwards: the upper bill is furnished with a distinct rib or ridge, running along from the tip nearly to its base, on each side of which it is furrowed, without any visible appearance of nostrils: the tongue is small, and placed far within the mouth, all the inside of which is black: a darkish line passes from the brow over the eyes, which are surrounded with a naked blue skin,

and, like those of the Owl, are set in the head so as to look nearly straight forward, and the extreme paleness of the irides gives them a keen wild stare. The gape of the mouth is very wide, and seems more lengthened, by a slip of naked black skin, which is extended on each side from the corners beyond the cheeks: these features of its countenance, altogether, give it somewhat the appearance of wearing spectacles. A loose black bare dilatable skin, capable of great distention, hung from the blades of the under bill, and extended over the throat, serves it as a pouch to carry provisions to its mate, or its young. The body is flat and well cloathed with feathers; the neck long: the crown of the head, nape, and, in some specimens, the hinder part of the neck, are of a buff colour; greater quills and bastard wings black, and the rest of the plumage white. The tail is wedge-shaped, and consists of twelve tapering sharp-pointed feathers, the middle ones the longest. The legs and feet are nearly of the same colour and conformation as those of the Corvorant, but they are curiously marked by three pea-green stripes, which run down each leg, and branch off along the toes. The male and female are nearly alike, but the young birds, during the first year, appear as if they were of a distinct species, for their plumage is then of a dusky colour, speckled all over with triangular white spots.

The female makes her nest in the caverns and fissures, or on the ledges of the louring precipice, as well as on the plain surface of the ground: it is formed of a great quantity of withered grasses and sea-weeds of various kinds, gathered with much labour from the barren soil,* or

* "They continue to pluck grass for their nests from their coming in

picked up floating about upon the water. She lays three eggs, of a white colour, and somewhat less than those of a Goose, although ornithologists assert that she will lay only one egg, if left to herself undisturbed, and that when this egg is taken away she then lays a second, and in like manner a third, which she is generally permitted to hatch, and rear the young one.* "The male and female hatch and fish by turns; the fisher returns to the nest with five or six herrings in its gorget, all entire and undigested, which the hatcher pulls out from the throat of its

March, till the young fowl are ready to fly, in August or September, according as the inhabitants take or leave the first or second eggs. It is remarkable of them that they never pluck grass but on windy days."—*Martin.* [It would appear from this that they are not so successful in taking their prey in boisterous weather as when it is calm.]

Martin gives an account of the Solan Geese stealing the materials of which they form their nests, from each other, and describes a battle between two of them in consequence of a theft of this kind: the one which had robbed the nest flew towards the sea with its load, and returned again as if it had gathered the stuff from a different quarter; but the owner, though at a distance from his nest, had observed the robbery, and waited the return of the thief, which he attacked with the utmost fury. "This bloody battle was fought above our heads, and proved fatal to the thief, who fell dead so near our boat, that our men took him up, and presently dressed and eat him."

* "The Solan Geese have always some of their number that keep watch in the night time, and if the centinel is surprised, (as it often happens) all that flock are taken, one after another; but if the centinel be awake at the approach of the creeping fowlers, and hear a noise, he cries softly *Grog, Grog,* at which the flock do not move; but if this centinel see or hear the fowler approaching, he cries softly *Bir, Bir,* which would seem to import danger, since immediately after, all the tribe take wing, leaving the disappointed fowlers without any prospect of success for that night."

provider, and swallows them, making at the same time a loud noise."

These birds are common on the coasts of Norway and Iceland, and are said to be met with in great numbers about New Holland and New Zealand; they breed also on the coasts of Newfoundland, and migrate southward along the American shores as far as South Carolina; they are noticed, indeed, by navigators, as being met with, dispersed over both hemispheres, and are probably one great family spread over the whole globe; but their greatest known rendezvous is the Hebrides and other solitary rocky isles of North Britain, where their nests, in the months of May and June, are described as so closely placed together, that it is difficult to walk without treading upon some of them; and it is said that the swarms of the old birds are so prodigious, that when they rise into the air, they stun the ear with their noise, and over-shadow the ground like the clouds.* At the small isle of Borea, Martin says "the heavens were darkened by those flying above our heads; their excrements were in such quantity, that they gave a tincture to the sea, and at the same time sullied our boat and cloaths." Besides this small isle of Borea, and St Kilda, noticed by Martin, Pennant

* Martin, in his History of and Voyage to St Kilda, published in 1698, says, "the inhabitants of St Kilda take their measures from the flight of these fowls, when the heavens are not clear, as from a sure compass, experience shewing that every tribe of fowls bend their course to their respective quarters, though out of sight of the isle; this appeared clearly in our gradual advances; and their motion being compared, did exactly quadrate with our compass."

and other writers mention the isle of Ailsa in the Frith of Clyde; the Stack of Souliskerry, near the Orkneys; the Skellig Isles, off the coast of Kerry, Ireland; and the Bass Isle, in the Frith of Forth. This last-mentioned isle is farmed out at a considerable rent, for the eggs of the various kinds of water fowl with which it swarms; and the produce of the Solan Geese forms a large portion of this rent; for great numbers of their young ones are taken every season, and sold for about twenty-pence each, in Edinburgh, where they are esteemed a favourite dish, being generally roasted, and eaten before dinner. On the other bleak and bare isles, the inhabitants, during a great part of the year, depend for their support upon these birds and their eggs, which are taken in amazing quantities, and are the principal articles of their food.* From the nests placed upon the ground the eggs are easily picked up one after another, in great numbers, as fast as they are laid; but in robbing the nests built in the precipices, chiefly for the sake of the birds, the business wears a very different aspect: there, before the dearly-earned booty can be secured, the adventurous fowler, trained to it from his youth, and familiarised to the danger, must first approach the brow of the fearful precipice, to view and to trace his progress on

* "They preserve the eggs in stone huts or pyramids, which they build for that purpose, as well as for a shelter to the fowlers: in these pyramids they cover up the eggs with turf ashes, which defend them from the air, dryness being their only preservative, and moisture their corruption: by this method, it is said, they keep them fresh and fit for use, for six, seven, or even for eight months."—*Martin.*

the broken pendent rocks beneath him: over these rocks, which (perhaps a hundred fathoms lower) are dashed by the foaming surge, he is from a prodigious height about to be suspended. After addressing himself in prayer to the Supreme Disposer of events, with a mind prepared for the arduous task, he is let down by a rope, either held fast by his comrades, or fixed into the ground on the summit, with his signal cord, his pole-net, his pole-hook, &c. and thus equipped, he is enabled in his progress, either to stop, to ascend or descend, as he sees occasion. Sometimes by swinging himself from one ledge to another, with the help of his hook, he mounts upwards, and clambers from place to place; and, at other opportunities, by springing backwards, he can dart himself into the hollow caverns of the projecting rock, which he commonly finds well stored with the objects of his pursuit, whence the plunder, chiefly consisting of the full-grown young birds, is drawn up to the top, or tossed down to the boat at the bottom, according to the situation of concurring circumstances of time and place. In these hollows he takes his rest, and sometimes remains during the night, especially when they happen to be at such vast and stupendous heights. To others of less magnitude the fowlers commonly climb from the bottom, with the help of their hooked poles only, by which they assist, and push or pull up each other from hold to hold, and in this manner traverse the whole front of the frightful scar. To a feeling mind the very sight of this hazardous employment, in whatever way it is pursued, is painful; for, indeed, it often happens that these adventurous poor men, in this life-taking mode of obtaining their living, slip

their hold, are precipitated from one projection to another, with increasing velocity, and fall mangled upon the rocks, or are for ever buried in the abyss beneath.

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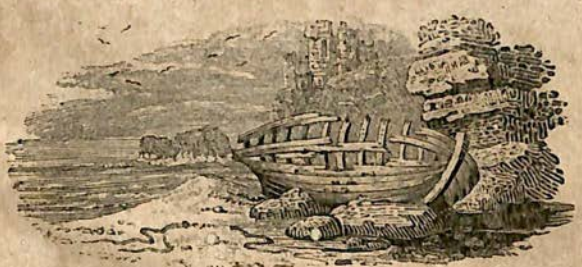

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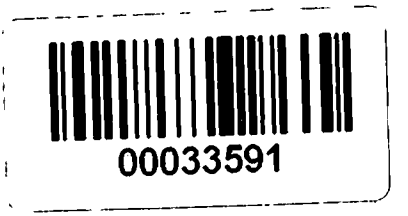
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